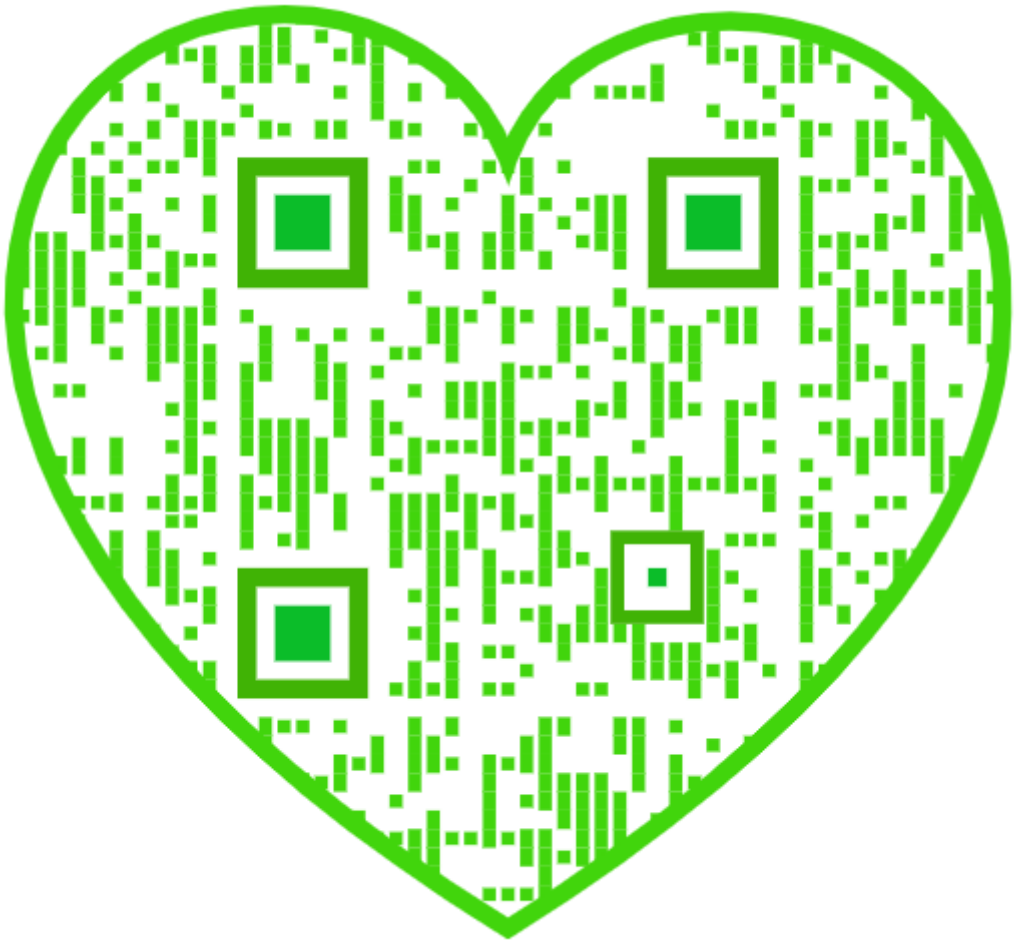
DESCRIPTIVE ECONOMICS



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DESCRIPTIVE

ECONOMICS

AN

INTRODUCTION

TO

ECONOMIC SCIENCE

FOR USE IN

ACADEMIES, HIGH AND NORMAL SCHOOLS

AND

BUSINESS COLLEGES

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ROCHESTER, N. Y.

PREFACE.

This work has been prepared on the theory:

1, That the subject of Economics does not necessarily involve all the abstract and deductive reasoning commonly attributed to it.

2, That it bears an exceedingly close relation to the practical affairs of every-day life in all stages of social and political development.

3, That this practical relation may be cogently and easily represented by reference to the actual movements of people in the various stages of economic development.

4, That delineation of economic activity, commencing with that connected with the lower economic stages and passing on to the higher, not only brings out the practical side of the subject, but also compels interest in it.

5, That the wants of the highest civilization are, after all, merely amplifications of and superadditions to the three original and necessary wants of savagery, viz: wants of food, clothing, and shelter. All modern wants are but differentiations of these. Their development, therefore, together with the development of the processes by which their satisfaction is secured, furnishes a proper and natural basis for study.

The work is a wide departure from the ordinary plan of most elementary works on Political Economy, or, as it is preferably called, Economics. These works generally commence with an abstract discussion of wealth or value. In the following pages the terms wealth and value are nowhere used in a technical sense, and the same is true of most of the technical terms of Economics. At the same time, however, the theories to which these terms give rise, are indirectly discussed and all the well known propositions of Economics are clearly and fully set forth.

It is hoped that the student and reader will find here the collection of economic phenomena, classified and arranged as required for the more abstract reasoning and generalizations relating to the higher branches of the subject.

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DESCRIPTIVE ECONOMICS.

INTRODUCTION.

CHAPTER I.

THE ART OF GETTING A LIVING.

A Bird's-eye View of the Subject.—Visitors to the Paris Exposition were advised to ascend the Eiffel Tower and secure a bird's-eye view of the grounds and buildings.

This was to be the first act of the first visit. It was urged that a general conception of the whole exposition would enable one to comprehend and classify the parts. For the same reason it will be well to commence our study of economics with a bird's-eye view of the subject. Having had a general view we can enter upon the classification and study of the parts.

A Point of View.—Place yourself, during the morning hours, on any of the great streets of the great cities of the world; on Friedrichstrasse, on the Strand or on Broadway. A tide of human beings pours out of the by-streets and surges along the main channel. How were they all sheltered last night? How did they breakfast? How will they dine? How will they be fed and sheltered to-night and to-morrow? How did they procure the clothing of such varied cost and of such various stuffs? How will they be clothed in the future? If you choose Broadway, commence early at the corner of Grand street. The scene reminds you of the exit of bees from a hive when the sun has dispersed the dew. Saunter down until, between ten and eleven, you are at the corner of Wall street. There is another hurrying throng, but the people may be a

little better dressed than at Grand street. Like the bees, however, going forth from the hive in the morning, everyone seems to have some absorbing purpose.

Another Point of View. — Cross Broadway and ascend the spire of Trinity Church. The stream of anxious faces is lost to view, but in its place there are the roofs of the city, intersected by the streets, like the paths of an ant hill. Away on the Jersey and Connecticut shores and up the Hudson are the outlines of other cities, and of towns and villages, with many fields and farm houses between. Down below no one is cultivating or herding. How will they get bread and meat? Out on the farms no one is trading or manufacturing. How will they get clothing and utensils? No one is quarrying or lumbering in the cities. How do they get materials for the buildings? How are the lumbermen and quarrymen supported in the distant forests and quarries where they are hewing and quarrying instead of sowing and reaping? Very few of the people whose homes come within the view are engaged in making things for their own use. They are not doing anything toward the direct satisfaction of their own wants. They make clothes which they will never wear. They are baking bread which they will not eat, and building carriages in which they will never ride. Many are doing something which does not satisfy hunger or thirst, nor produce clothing or shelter. How will they all get what they want and what they need? How are their wants satisfied? How are your wants and my wants satisfied? In some of those distant towns most of the inhabitants are engaged in making a single class of articles. It may be shoes, and perhaps men's coarse shoes at that. They must have ladies' shoes and children's shoes, besides other clothing and food. How will they get these things?

Economic Knowledge.—The person who knows that such questions exist and can answer them has some economic knowledge. It is economic knowledge in a restricted sense. All these toilers of the cities, the villages and the farms; all human beings in fact, have wants. We all want the necessities of life. We not only want them, but we must have them. "Man must eat or die." In the next place we want the comforts of life.

We want them in order to live as we were designed to live, above the brute creation. We must all be doing something towards supplying these wants. Even if a constant supply of manna were rained down, we would have to gather it. We are born to work, and in the ordinary course of things every man and woman does something toward procuring the wants of life. In addition to the comforts of life many men want its luxuries. We have, therefore, three classes of wants which mankind is striving to procure, (1) necessities, (2) comforts and (3) luxuries.

In a more general sense economic knowledge is knowledge of the ways and means practiced or employed by man to satisfy these wants. In the language of a German economist, it is knowledge of activity "directed to the acquisition of material things for the satisfaction of human wants." This activity constitutes our economic life.

Industrial Society.—When men try to procure the necessities of life and satisfy their wants, they soon find that they must come in contact with other men. The hermit life exists, in modern times, only in imagination. The hermit discovers that unless he enters into his hermitage with a large stock of the articles which the labor of other men has helped to produce, he is soon in the direst want. In all places and under all circumstances, men are dependent upon each other. Among modern nations in particular, they find that getting a living brings them into close contact with each other. There is less of this mutual dependence among savages. Even in the rudest times of which history gives any account, however, there has always been some kind of social dependence. There has always been the society of the family. Man has never existed in a perfectly isolated state. This mutual relationship and dependence among men, in the process of getting a living, constitutes the foundation of industrial society. Industrial society has come to be that harmonious system, "operating as a piece of mechanism," whereby the wants of each individual are supplied for him, and brought to him from the various parts of the world; and as every man has wants, so every one is a member of industrial society. If each individual was sufficient unto himself; if each one raised his own wheat, and made his own flour; pas-

tured and slaughtered his cattle; sheared his sheep and made his own clothes; in fact, satisfied all his wants by his personal efforts, there would be no such thing as industrial society.

Its Extensiveness.—Among savage peoples, industrial society does not extend beyond the family circle. The family provides its simple wants by the labor of its own members. As civilization advances, a larger body of individuals are brought into contact with each other. Our wants become greater and more varied as civilization advances. When they become as numerous as pertain to highly cultivated life, we may be dependent on many men located in distant parts of the world. If you want a sealskin garment instead of a woolen garment, you may be dependent upon the sealer in Alaska, the dyer in London, and the furrier somewhere else. Industrial society, therefore, is not confined within government boundary lines. It is not like political society, governed and directed by a constituted centralized authority. It knows no tongue and no kinship. It is the sum of all the individuals who, directly or indirectly, depend upon each other in the struggle of life. Set down in a vertical column all the occupations and employments of men, commencing in alphabetical order with abacist, a man who gets a living by casting accounts, to zymologist, the man who devotes his time to the fermenting of liquors, and including most of the women under the head of cooks or housekeepers, add up the list and the sum would represent industrial society.

Economics.—When we understand what economic knowledge is, it is not difficult to understand what "economics" means. It pertains first of all to the arrangement of economic knowledge in a classified and systematic form. This book is an attempt to arrange economic knowledge for the purpose of study, and the work as a whole, therefore, may be called a definition of economics. There have been many definitions of the subject. Some of them are not difficult to comprehend. Others involve the consideration of the principles of economic science and require a large range of economic knowledge. It would answer, at this stage of our study, to define it as the art of getting a living. If we stopped there, however,

we would find that our definition lacked exactness. We will go a little further and call economics a study of men in their relations to industrial society. We may say that its aim is to show us how men are conditioned in the struggle of life by their necessary connection with industrial society, and the membership which they necessarily have in it. After all, any definition which we might adopt would be open to criticism, because it has already been said that the whole work is the definition. We are not studying an exact science in which exactness of definition is possible or necessary.

Economic Activity.—During the progress of our study we shall have frequent occasion to refer to the economic activity of individuals and of peoples. We often ask of an individual: "What is he doing for a living?" The answer to that question is, practically, a statement of the man's economic activity. It means his economic life; what he does toward satisfying his wants and what his relations are to those with whom he is directly in contact and what his relations are to industrial society at large. If we deferred strictly to the writings of the best economists we should have to add largely to our definition of economic activity. We will make the additions in the course of the study, however, and for the present consider a man's economic activity, and which is the same thing, his economic life, to consist of all that he does for a living—both the seen and the unseen. That is to say, if he drives a street car for a dollar and a half a day, his economic activity consists of his day's work, which we see him do, and of all the minor things connected with the spending of the money, some of them seen but most of them unseen. The economic activity of a nation or a people, or its economic life, is the aggregate of the activity of the individuals.

Political Economy.—This is the term hitherto most used instead of Economics. We may consider the two terms as meaning the same thing. French writers claim that one of their number, M. de Watteville, first used the term political economy at the head of one of his works in 1615. It has been used ever since, and centuries of usage stand in the way of substituting the term economics. The time will doubtless come,

however, when the greater definiteness and convenience of the word economics, will overcome the prejudice of usage, and it will supplant the term, political economy.

Descriptive Economics, pertains to the simple statement and narration of economic facts. There are supposed to be economic laws which regulate industrial affairs, and the material welfare of men. It would be the province of the science of economics to ascertain these laws; to state them; to discuss the theories pertaining to them, and upon which they are founded. Descriptive economics would have little to do with these laws or theories, although it would call them to its aid whenever necessary. It would preferably be limited to the description or statement of the manner in which men obtained a living and satisfied their material wants in all the past, and how they satisfy them to-day. We shall see that industrial society has passed through certain well defined stages. They are called the economic stages. Descriptive economics would describe these stages, stating the facts, just as a historian would narrate the history of a city. It would follow their sequence and describe the economic activity characterizing each stage. It is the province of the theoretical economist to draw conclusions. But before he can draw conclusions the economist must have, or at least he should have, a stock of economic facts, just as the biologist must have systematic descriptions of the structure and functions of different types of animals, before he can form generalizations concerning the various types. Descriptive economics would gather and classify economic facts relating to the various stages of economic evolution by the use of which you can draw general conclusions as to economic phenomena, or test those you have already drawn.

Relation to Other Studies.—Economics is usually classed among the social sciences. It is a subdivision of sociology. Sociology is itself a subdivision of the larger branch of knowledge, anthropology or the science of man. In looking over a work on anthropology we find one part devoted to ethnography, describing the various races of men and their different characteristics and habits. After passing other parts we come to a part on sociology, which treats of man as living in society.

Under sociology we find a chapter entitled "The Arts of Life." Descriptive economics has to do with the arts of life. The study of economics is still in its infancy, and much economic knowledge still remains to be made certain and definite. There is much that is unsettled, and therefore much difference of opinion among writers on economics. This difference of opinion relates more to the so called economic "laws," to theories and general conclusions than to descriptive economics such as we propose to study.

The Art of Getting a Living.—Having surveyed the subject we see that it pertains to the art of getting a living. It will appear, at the first glance, that many subjects to be discussed have nothing to do with getting a living. Careful examination of them, however, will show that they all relate to the material welfare of mankind, and by "living" is meant not only man's wants of necessity—those which he must have in order to live at all—but the comforts of life, those which he must have in order to live worthily. The ultimate aim of all economic study, therefore, is to show how men obtain a living in the various stages of industrial society, and how the getting of a living is effected by their membership in, and relations to that society.

CHAPTER II.

THE NEED OF ECONOMIC KNOWLEDGE.

Its Practical Nature.—Economics under the old title of Political Economy has been called "the dismal science." The reason for this lies in the fact that the study has usually been confined to the study of theories, and also because the text books on economics have been prepared largely with the view of teaching theories. Economic theories have their place, and their study would be more popular if economic facts were first studied and understood. The facts we are to study are the facts of daily life. How men got a living in the ages of the past; how they get a living to-day. How we get our income and how we spend it. We have seen that this is economic knowledge. It is so closely related to our welfare—to our very being in fact—that its rudiments ought to be a part of the public school course of study. There ought to be a wide diffusion of economic knowledge, (1) everywhere, (2) at all times. There are, however, some special reasons why there ought to be a wide diffusion of economic knowledge, (1) in the United States, (2) at the present time.

Our Political Growth, is one of these reasons. There is said to be an army of persons in the employ of the government. The population of the country is increasing, and the machinery of the post-office, the internal revenue, and other government bureaus and departments, must be extended accordingly. The number of people, directly and indirectly employed by the government is increasing from year to year with great rapidity. The temptation of political parties to control these offices and name this army of government employees is greater than party honor can withstand. This temptation is not likely to be less than it is to-day. The first trap which a demagogue sets to catch votes, relates to some question of economics. People cannot be deceived as to purely political questions. Political knowledge is too widely diffused. As to economic questions,

however, many voters are at the mercy of party leaders and the party press. Here we have an illustration of the wisdom of Dr. Arnold's saying: "A faulty political economy is the fruitful parent of evil."

Great Aggregations of Capital.—Great corporations and large firms, controlling vast capital and directing great industries, are common features of the business of the day. Their existence is a reason why there should be a wide diffusion of economic knowledge. It is no longer the railroad corporations solely which represent great aggregations of capital, although, by a number of them combining, practically under one management, the concentration of capital is greater than ever before. Great manufacturing concerns control manufactures. When they begin to conflict and harm each other, they form themselves into a still greater and more far reaching combination of energy and management—the trust. There has recently been a marked tendency toward the formation of great trading combinations, for the purpose of controlling larger trade in manufactured articles. You can study this subject by observing how in your own town or city, this or that mercantile business which was formerly conducted by an individual or a firm, has been "capitalized." The business has been transferred to a stock corporation for the purpose of procuring more capital and enlarging its trade. Carpets, groceries, dry goods, are sold by corporarations. This means fewer merchants conducting an individual business and more men who must seek employment in the service of others. The change is going on in manufactures which has already taken place in mercantile industry. Not long ago there were many little shops where the proprietors, assisted by one or two workmen, in much the same relations as existed between the medieval master-workman and his journeymen, carried on limited manufacturing enterprises. These individual shops have been closed. The proprietors and assistants have gone into the service of large manufacturing concerns. These changes in business methods involve changes in the industrial life of many individuals and affect the aggregate industrial life of the nation. A wide diffusion of economic knowledge will allow of the occurrence of such changes with less individual

hardships and with less chance of harm to the industrial life of the nation. We shall look further into these changes when we come to discuss what is called in economics the division of employments. The principle involved may be illustrated in this way: Our grandfathers brought in the wool from the barn and our grandmothers wrought out the finished homespun. The man made the loom, reared the sheep and sheared the wool. The woman carded, spun and wove it, and if need be dyed it also, even with home-made dyes. She made the coat also. Two persons produced the garment ready for wear. In our times hundreds of persons labor to produce a single coat. Let us look at some of the steps involved. There is: 1, the raising of the sheep; 2, the transportation of the wool; 3, its manipulation in the factory; 4, the building of the intricate machinery of the factory; 5, the grinding of the dyes; 6, their transportation; 7, dyeing of the cloth; 8, the transportation of the cloth; 9, the cutting by the cutter; 10, the sewing by the tailor. These are some of the direct steps involving the direct application of labor. There are many indirect steps involving indirectly the application of the labor of many other people. What is true of a coat is true of a pair of shoes, of a carriage, and of all the articles of common use.

Great Labor Organizations, suggest another reason why economics should be studied. The vastness of our territory and resources seems to have breathed the spirit of development into the organization of labor as well as of capital. At any rate, the organization of labor, from the local trades union into the district union, the district union into the state federation, and the state federation into the national federation, has grown, side by side, with the growth of the aggregation of capital. The aggregation of capital, under a single head and management, controlling a great number of employees and their daily bread, is likely to beget discontent among the employees. Organization of labor will meet organization of capital, and will grow for the purpose of meeting it.

Diversity of Climate.—Our territory extends from the climate of the arctics to that of the semi-tropics. Our natural productions are such as belong to these and all intermediate

zones of climate. This diversity of productions gives rise to widely diverse pursuits, industries and interests. The whole country, however, is to be governed as a political unit. All industries must be prospered. The occasion demands the wisest statesmanship. No nation ever presented a finer field for the application of economic knowledge. It should be diffused so that it may be used.

The Economic Undertakings of Government.—Men in public life are beginning to recognize the importance of correct economic regulations in public affairs. Good economics in governmental matters is seen to promote the aggregate industrial welfare of the people, and when the aggregate industrial condition of the people flourishes, the nation flourishes. Government, therefore, tends to step in and look after economic matters which were formerly in charge of private individuals, or else entirely neglected. Compare the annual messages transmitted in 1892 by the President and by the Governors of the various States, with those of a period of ten or fifteen years earlier. Out of fifty subjects, separately discussed by President Harrison, one half were economic questions; out of twenty-one subjects discussed by Governor Flower of New York, sixteen were economic subjects. Unwise legislation on economic matters is worse than no legislation. Better the "Laisser faire," or let alone principle of Colbert. Nothing short of a wide diffusion of economic knowledge will ensure correct economic legislation.

Industrial Growth.—The recent industrial growth in the United States is the last of the subjects which might be named as bearing on a wide diffusion of economic knowledge. This growth has not been greater than in other countries, but, when industrial conditions are compared, it has been more marked. This industrial growth has given rise to increased and more varied wants and greater diversity of employments. Economic knowledge must be wide spread, so that men may know the new conditions of getting a living. Some of these new industrial conditions have been mentioned under the head of "great aggregations of capital," and might be profitably repeated to illustrate the social economics of industrial growth. The

concentration of capital, however, is only a phase of the recent industrial growth of the nation. It was only about twenty-five years ago when Emerson noted that it appeared to him as though the inventions of the fifty years prior to his time were equal to all the inventions of the fifty centuries before them. To-day, however, looking back over the quarter of a century since Emerson wrote, it appears to us that its discoveries and inventions and new and improved industrial methods are far more important than those of the previous half century.

CHAPTER III.

THE STRUGGLE OF LIFE.

Man's Three Necessities.—There are three necessary wants which men must satisfy in order to exist. They must have food, clothing and shelter. Other wants can be dispensed with, but if nourishment fails, and protection from the storm and cold and night fails, disease ensues, and starvation and exposure put an end to being. Most animals can get along without artificial clothing or shelter. Nature, however, has failed to provide man with the bodily covering and protection which he requires in rigorous climates. Man's necessary wants, therefore, are more than those of the horse or the dog or the bear.

The Struggle for Food.—The one necessary want of all animal creation is food. The structural organization of men and animals is constantly decaying, and as constantly being renewed. The organs of motion, respiration and digestion are constantly subject to waste. The renewal must be provided for. The vital processes of life require the presence of animal heat. There must be fuel in the shape of food to keep the fire burning.

Carnivorous Plants.—Man has an easy time in life compared to the struggle which is going on among the lower animals. The difficulty of obtaining the requisite supply of food increases descending from the higher structural organizations to the lower. Among the lowest forms of animal life, like the carnivorous plants, the struggle becomes pitiful. A sponge has been likened by a fanciful writer to a city where the inhabitants line the sides of the streets and take their food as it passes by. It is a very pretty fancy, but cruelly unreal. The sponges, like the sea lily and other fixed carnivorous plants, are at the beck and nod of the slightest current. If a current does not happen to bring infusorians their way, they starve. It is true they may reach out their tentacles for a little way about, catching wildly at the drifting food, but most often it sweeps by

them. The oyster can crane its neck a little distance, and the clam a little farther, but ordinarily they must lie helplessly by and see, or feel, their food drift away.

Economic Struggles of Animals.—Ascending the scale of animal life we find the struggle almost as constant and as fierce. It has been aptly divided into two forms having economic aspects. There is first the struggle between fellows—"between animals of the same kind which compete for similar food and other necessaries of life." They can go and seek it, to be sure, but if nature does not provide it, what then? Or, if there is not enough to go round and fill all mouths in peace? Then it must be wrenched away with tooth and claw. After the struggle between fellows for the same food, comes the struggle between natural foes—between animals of different kinds. It is the struggle between carnivores and herbivores. The struggle is now two-fold. It is between one kind—between carnivores for the same food, and the other kind, the herbivores, to escape their natural foes. The herbivores must not only look out for their food, but must also look out for themselves. Naturalists differ as to which form of the struggle is keenest. Mr. Grant Allen thinks it is the struggle between fellows—between animals of the same kind for similar food. He proves his theory by saying that "the baker does not fear the competition of the butcher in the struggle for life; it is the competition of the other bakers that sometimes inexorably crushes him out of existence. In this way the great enemies of the individual herbivores are not the carnivores, but the other herbivores. It is not so much the battle between the tiger and the antelope, between the wolf and the bison, between the snake and the bird, that ultimately results in natural selection or survival of the fittest, as the struggle between tiger and tiger, between bison and bison, between snake and snake. * * * The struggle is fierce between allied kinds, and fiercest of all between individual members of the same species."

Mr. J. Arthur Thompson, whose book, *The Study of Animal Life*, contains many illustrations of the social and industrial life of animals, doubts the truth of Mr. Allen's statements, holding that the evidence upon which they are based is very

unsatisfactory. Mr. Thompson finds that there are many peaceful devices by which animals have discovered a way out of a situation in which a life and death struggle might seem inevitable—such as separation into bands and migration.

Changeful Surroundings.—There is a third kind of struggle among animals which has an economic point also. It is the struggle with changeful surroundings. It is the struggle to adapt themselves to the changing condition of physical environment, and as physical nature is careless of life, it is sometimes called the struggle with Fate. "Changes of medium, temperature and moisture continually occur, and the animals flee for their lives, adapt themselves to new conditions, or perish." But man must also adapt himself to changing physical conditions. His necessary want of clothing, already referred to, means that he must adapt himself to the changes of the season and of temperature. Primitive people readily yield to the struggle with fate as it comes upon them in some forms of physical environment. The savage fisherman sees a line of shell fish fringing the beach. The mollusks have been hurled up by the surf and left to die by the receding tide. Even so, he thinks, nature may have a fate in store for him against which it is useless to resist, and he gives way to fatalism. As we proceed with our study we shall see that economic progress is the conquest of nature by man. Man's victory over fateful conditions has been gradual but sure, until nature now rarely presents them and man laughs at the old terrors of physical environment.

The Food of Animals.—Billions of infusorians upon which acres of carnivorous plants could fatten for years, would make a scant mouthful for a whale. If they made a mouthful they would afford but little nourishment. The food of the higher animals is more nourishing than that of the lower. The sources of supply become more numerous and the character of the supply more varied as the structural organization ascends. Descending the scale, however, we find the art of subsistence becoming more simple. The carnivorous plants imprison food within their petals and assimilate it by a process of absorption. If we descend the scale of organization until we reach the vegetable kingdom, the mystery of subsistence vanishes.

Moreover, the lower the structural organization the greater the dependence. The carnivorous plants must take what nature brings to their mouths. The herbivores are able to forage for themselves and decrease the chances of starvation. The structural organization of the carnivores, together with the character of their food, fit them to survive on a meal now and then, and periodical famine produces no great discomfort. The omnivore usually demands its daily bread, and it is reasonably sure of a breakfast, dinner and supper. The higher the structural organization, therefore, the more stated must be the supply of food and the more nourishing its character. What is true as to structural organization is true also as to economic development. The higher the economic state, the more regular must be the food supply. Domestic animals cannot endure hunger and thirst as long as wild animals of the same species, and the greater the facility with which food is obtained the more dependent all animals become upon a stated supply.

The American Indians, in their aboriginal state, required but little food as compared with the wants of highly civilized men. They could go without nourishment for astonishing periods and at the same time maintain all the appearances of normal health. One full meal a day was the usual allowance, and if that should fail it caused no great inconvenience. We may say generally, therefore, that man's necessary wants, so far as food is concerned, require a more certain and regular supply of a more nourishing quality than is required by other animals. The supply must also be greater, more regular, and of a finer quality as his economic condition develops and assumes a higher character. This thought is further discussed in the next chapter. One of the purposes which descriptive economics has in view, however, is to show that men are better nourished, clothed and sheltered as their economic condition progresses, and, therefore, we may expect iterations of the thought as we proceed.

Clothing and Shelter.—The fire which is said to be burning within the body, or the chemical action going on there, must ordinarily, in the case of man, be protected from without. Few of the lower animals require more than the garb in which

nature has dressed them. In tropical climates man can get along without much artificial covering. It is "getting along," however, not living. When ill health and disease come, artificial clothing and protection must come with them. Without artificial clothing and shelter we would be obliged to live in the tropics. Man appears to be born for all climates, and to be endowed with the faculty of preserving his life and health in all climates by supplying what nature has failed to provide for him.

CHAPTER IV.

MAN'S WANTS AND THEIR SATISFACTION.

Man Distinguished From Other Animals.—The title of the last chapter, "The Struggle of Life," indicated that the struggle is to a certain extent universal. The struggle for food is not only a constant struggle by man, but also by all other animals and by all animal life. Naturalists have tried many times to construct a definition which would distinguish man from other animals. They used to say that man was the reasoning animal, but the more they studied and understood animal life, the more they were compelled to admit that some animals seem to reason. Out of all the traits and characteristics of man, it is hard to find one which is not slightly imitated in some degree by the higher forms of the brute creation. It would not be strange, therefore, if we should find among the more intelligent brutes, signs of a desire for the comforts of life, in addition to necessary wants. These desires are not instinctive, however. They are the results of an unnatural environment imposed by man. The lower animals have no wants in the sense that man has wants. Animal instinct demands only necessities. Man alone demands something besides necessities. The number and character of man's wants are subject to indefinite increase and extension. The aggregate want of the lower animals remains the same from generation to generation. This fact brings us to:

Another Class of Wants.—The wants which were discussed in the last chapter were necessary wants. The wants of food, clothing and shelter which man must have in order to live at all. We come now to a class of wants which man must have in order to live worthily. They are popularly denominated comforts. They are the peculiar wants of man, distinguishing him from brutes. Economics considers man in the light of his divine origin. It treats of him as having a purpose on earth greater and nobler than that of other animals. It considers that he would

not accomplish his purposes, if he did not develop wants distinguishing him from the beast. To-day the horse is a thing of beauty and symmetry. Its wants are the same, no greater, no less, than at the time when it was a scrawny digitigrade, walking on five fingers and toes; centuries of domestication, breeding and natural selection have not increased its wants. During the same time man's wants have increased infinitely. They increase from age to age, from one stage of civilization to another. With each successive stage of advancement they become more numerous, more varied and of a higher quality. Many necessities of the present day were the luxuries of our grandfathers. The tallow candle was once a great *comfort*. The electric light is a *necessity* of modern civilization.

The Satisfaction of Increasing Wants.—This is the great problem of economics. It being conceded that man ought to have more wants than other animals, that he ought to want more than the bare necessities of life; that his wants ought to keep growing in number and quality, and that men ought to desire comforts in order to become what they are destined to become, then the problem is: How shall these comforts be procured? How shall these increasing wants be satisfied? Philanthropists talk of the poor growing poorer. They refer to the difficulty of procuring the increased wants of advancing civilization—of keeping pace with economic progress. It is just as easy for the inhabitants of Western New York to obtain the bare necessities of life as it was for the Senecas. It is easier, in fact. The necessities of life are obtained with greater facility now than when Hudson sailed past Manhattan Island. The comforts of life are more abundant and more widely distributed. Non-satisfaction of wants results in the condition which we call poverty. But when the poor grow poorer, it is not because of the non-satisfaction of necessary wants. It is because they fail to procure the comforts which others enjoy. It is relative poverty rather than absolute poverty.

Increasing wants are satisfied and the comforts of advancing civilization are procured by means of the organism which is called Industrial Society. It is that "harmonious system"

which brings our wants from all parts of the world; which produces them here and there, in all parts of the earth, and distributes them from hand to hand. To know what that harmonious system is; how it has grown with the growth of population; how it has adapted itself to the changes and exigencies of growing civilization is part of the work in hand. We shall see as we proceed that as civilization advances men forsake the partially isolated economic life, characteristic of very primitive peoples, and work together. They find it to their advantage to coöperate in the work of satisfying their wants. This coöperation becomes the system which was referred to in the paragraph on Industrial Society, in chapter one. In proportion as wants become more numerous and higher in character, the more necessary it is for men to depend upon this organism of industrial society for their satisfaction. At the beginning of our study we cannot over-rate the importance of industrial coöperation as a factor in economics. Not industrial coöperation in some specific undertaking, by particular individuals of a local community, but industrial coöperation of mankind in general—of the race. It is that coöperation of the clock makers of the Black Forest, and the wheat growers of Dakota, and the coffee planters of Honduras, who work together each according to his special economic advantages and conditions, for the satisfaction of the aggregate want.

The Comforts of Food, Clothing and Shelter.—In looking around to see what we have and use at the present time, we find that nearly everything is an improvement simply, upon the original necessary wants of food, clothing and shelter. We want now a greater variety of food than the savage man. We want variety in the cooking of it, and we want it better in quality. The innumerable varieties and delicacies of modern food aim at the satisfaction of these increased wants. The same thing is true with regard to the comforts of clothing and shelter. The clothing of the Fuegian consists of a bit of seal skin hung by a string from the neck. It is shifted about according to the direction of the blast, so that only the windward side of the man is protected. His hut is of the same character. It is simply a temporary shelter, sufficient for the hour. It

has no stated entrance. He goes in on the leeward side and closes up the gaps to windward. His sole aim in life is to satisfy the purely animal wants, those which will preserve and prolong existence. The wants of the higher stages of industrial society demand something more than the necessaries of life. They demand roast capon; terrapin; broad cloth; furs; houses of many rooms, and many gables, comfortably appointed. All through the ages, from historic times, the number of man's wants, their character and quality, have been the thermometer of his progress. They have indicated the stage of industrial society and measured the diffusion of human culture.

Therefore, in all ages and at all times, the struggle of mankind has been and is, to satisfy, (1) necessary wants; (2) wants of comfort. The means which men adopt to satisfy the wants of both classes; the persistence with which they seek to satisfy the wants of the second class, and the extent to which they succeed, is the measure of their separation from the lower animals. Well meaning people sometimes say we must learn to be content,—that we must set a limit to our wants and not be striving for something more. They quote Paul's words: "For I have learned in whatsoever state I am, therewith to be content," just as though Paul meant to say that it is wrong to make our state as comfortable and as satisfactory as possible. Perhaps we should not want more than it is in our power to properly satisfy, but the real benefit arising from the existence of wants lies in the fact that it sets us to work satisfying them. Life is enlarged and economic activity extended. Our economic capacities are developed by our trying to keep pace with increasing wants.

We have now finished the four introductory chapters designed to give a general view of the purposes of our study. We are now in position to better understand those purposes. It is not necessary to make another definition of economics, nor need we enlarge upon the definition already attempted. The progress of the work will be an unfolding and an enlargement. We may profitably reiterate, however. In some studies iteration is always profitable. We shall find that to be particularly true of the study of descriptive economics. We shall find occa-

sion, therefore, in our progress, to reiterate designedly and for the purpose of obtaining clear conceptions. In chapter one, economics was defined as the study of men in their relations to industrial society. At the end of the same chapter it was said that the ultimate aim of economic study is to show how men get a living in the various stages of industrial society, and how their membership in industrial society conditions them in the struggle. A reiteration of the same thought, in slightly different language, would read like this: "Economics inquires how the various wants of the people of a country, especially the wants of food, clothing, fuel, shelter, may be satisfied; how the satisfaction of these wants influences the aggregate industrial life, and how in turn they are influenced by the industrial life." We are now ready to commence that inquiry.

PART I.

ECONOMICS OF THE FAMILY.

CHAPTER I.

THE BEGINNING OF INDUSTRIAL SOCIETY.

Gregariousness.—Very few members of the animal kingdom live strictly isolated lives. The rapacious animals usually lurk alone in forest and jungle, although some fellows of their kind are frequently found not far away. The lower forms of animal life, endowed with but little sensation, drag out a miserable, solitary existence. The higher forms, although not classed among the gregarious animals, rarely live entirely alone. Solitary life is but for short periods at the most. Union and association with their fellows come sooner or later. Isolation is the exception; gregarious life is the rule. The hoofed animals are seldom found alone. The carnivores are less gregarious than the herbivores. The hunter who finds one squirrel in a piece of timber is sure that another squirrel is not far off. When Aristotle wrote that man is a social animal, it was one way of expressing the fact that man lives gregariously, and is to be classed among the gregarious animals.

Family Life among Animals.—Naturalists profess to have discovered among animals indications of the existence of the institution of the family. The signs may be slight, but at least they are far off prophecies of the condition of things which we may expect to find among men. There is the love of mates, almost universal in its existence. We find animals entering into relations of mutual helpfulness, rendering mutual aid to each other and their offspring, rearing and breeding with all

the tender solicitude of humanity. If you have watched the selfsame robins, nesting year after year in the same old spot beneath the porch, and year after year exhibiting the same touching anxiety for the welfare of their young, you have seen signs of the family life. A little closer attention and study show that "the sociality and helpfulness of animals are flowers whose roots are in kinship."

Industrial Society of Animals.—By living gregariously, animals advance their material interests in two ways. In the first place their association becomes a combination for purposes of defense. In the second place their gregarious association is an advantage in procuring subsistence. In all cases of animal sociality they seem to get some good out of society and association. Association for defense is the more primitive and the more widespread. Cliff swallows enter into combination and render mutual assistance in warding off intruders. King birds unite in defending their nests against crows. The herbivores associate in defending themselves against carnivores. Many of the hoofed animals, naturally of a timid disposition, would be practically defenseless against the attacks of rapacious animals, did they not exercise mutual helpfulness. A herd of deer will frequently ward off the attack of a whole pack of wolves. Association for the purpose of procuring subsistence is perhaps a little higher type of animal society than association for defense. In its most primitive form it is simply association and combination in attacking or hunting prey. In this form it is represented by the pack hunting animals; by vultures, kites and some eagles, which unite in pursuing their quarry; by pelicans which form a semi-circle at the sea shore and gradually advance the circle to the beach, driving the fish before them. Then comes association in which there seems to be a mutuality of labor beyond that involved in mere combination for attack. Himadryad baboons have been known to unite to turn over large stones and divide the spoils found beneath them. Beavers, bees and ants live in a fairly well organized industrial society, sharing all the labors connected with getting a living. The ants are said to take their turn in going up the trees "to milk their cows." The reference is to their habit of procuring

subsistence from the Aphides, as related by Linneus. They tickle the Aphides with their antennæ and the resulting irritation causes an exudation from the pores upon which the ants feed. The colony forming animals perfectly illustrate the essence of industrial society. They illustrate its progress as association for attack and defense illustrates its beginning.

The Human Family.—We have seen what has been called its far-off prophecies. That which is found to exist in a crude state, with crude relations, among the lower animals, we would naturally expect to exist in a more sublime form with higher relations and affections among men. In man the attraction of mates is deepened into love, and he is born into the family. That is his condition without his assent. Geologists and ethnologists dig into the earth and tell us that they find evidence of a time when man was a solitary brute, living alone in caves. But that time is prehistoric. History and the remotest explorations of travelers tell us of no such time and no such men. Men are everywhere found living in the family, and society has everywhere been found far enough advanced to embrace the family as one of its institutions. It is certainly not necessary for our present purposes to study the state of things prior to the institution of the family.

And even those prehistoric men must have felt the desire for mutual relationships, and practiced the sociality existing among the lower animals. The relations and affections of social life must certainly have assisted in the struggle for material subsistence. They must have lessened the intensity of the struggle and ennobled its character, because they guaranteed existence and progress. The struggle itself must have attained higher conditions and reached the real affection of kinship. Then, too, we can hardly conceive of a time when men did not know that they were social animals. It is knowledge of their nature which distinguishes them from other animals. Our study, therefore, commences with society, and man in society. It begins with the family as the earliest and most primitive form of society, and regards man as a member of the family and a member of society. It regards the family as the very beginning of industrial society, and as that form of industrial society

which has existed everywhere and among all men at some time, and through which all peoples have passed. The machinery whereby economic wants are supplied to individuals is first set in motion in the family itself. The machinery is operated by the members of the family, independent of all other families and individuals.

The Isolated Family.—Dr. Kane, the Arctic explorer, tells in his journal how Hans and Morton, two of his lieutenants, went out from the ice-bound brig on an exploring expedition. When about seventy-five miles from the ship they found two huts containing two families. The spot was thousands of miles from civilization, and from a stated source of supplies. The frost-bitten travelers were taken in and treated to the comforts of home. Everything was home-made. The simple utensils with which the huts had been built, whereby they were warmed, and with which the daily food was prepared, and the food itself, had its origin in the labor of each family. Each family was sufficient unto itself. Each provided itself with all the wants of life. It is true that these wants were few and simple. They were necessarily so. Each family was its own carpenter and builder, tanner and leather worker, hunter and fisher, sleigh-maker and cook, and the productions of the family labor must necessarily, therefore, be crude and simple. The study of family activities as illustrated by such examples; the study of means and methods by which an economically isolated family provides itself with food, clothing and shelter, is the beginning of the study of economics. It is not often that families are found in a more isolated state than those discovered by Dr. Kane's men. Among the rudest people discovered by travelers or described by ethnologists, it is found that families congregate. It is not a normal condition of things when a family goes off into the forest or waste and lives by itself. The fact that two or more families live in the same neighborhood, however, does not preclude the idea of economic isolation—the state in which each family produces all its wants, by the labor of the members of its immediate circle. Economics of the family relates to the getting of a living by an isolated family.

Territorial and Economic Isolation. — Care must be taken to distinguish mere territorial isolation from economic isolation. When the isolated family is referred to as the beginning of industrial society, it is the economically isolated family which is meant, and not the territorially isolated family. There is a certain territorial isolation about all pioneer life. There may also be a partial economic isolation. Let us illustrate: When a pioneer walked from the head of navigation on the Hudson up through the valley of the Mohawk into the far Genesee country with a pack slung from his axe handle, and cut down some of the huge sugar maples and beeches, making room for a log cabin, he became territorially isolated. His nearest neighbor rarely heard his rifle-crack. There was a partial economic isolation also. His own labor, united with that of his help-mate, produced nearly all the family wants—fish from the river, game from the woods, the product of the first little garden patch which was cleared. He tanned deer skins for various articles of clothing, and later on spun wool from the sheep, or flax from the field. And so we might go on naming the wants which he supplied by his own exertions without calling upon the outside world. So it has been from the time of the Pilgrim Fathers to the time when their children pushed out west and north, and their children's children built cabins in the forests and on the plains of the great West. Theirs was a territorial isolation. At the most it was only a partial economic isolation. If we compare it with the condition of things at the beginning of industrial society it was a very slight economic isolation indeed. Our pioneer ancestors brought with them their axes and their clothing. These were the visible signs of an advanced economic life and a highly developed industrial society which existed elsewhere, and which they had left behind. These things, moreover, exerted but a slight effect toward reducing their economic isolation compared with the effect of all the arts of life which they brought with them. They brought from the economic life which they left behind knowledge of fire, of the use and construction of tools, of the various processes of tillage and the cultivation of plants and seeds, of the domestication of animals, of improved methods of taking fish

and the wild animals, of weaving and building, and mining and pottery making. The real economic isolation and the real beginning of industrial society commences with the discovery of the very earliest of these arts of life—with the families which began their practice after a rude fashion. Industrial society grows with the development of these arts, and it is a very slow growth. From the discovery of one art to the discovery of the next means, frequently, the lapse of ages.

CHAPTER II.

THE FRUIT AND NUT GATHERER.

Food Resources of the Family Stage.—Bearing in mind that we are now studying that period of industrial society when the isolated family is its unit and its highest development, our first inquiry naturally relates to the sources of food supply. These sources must necessarily be restricted and limited. There is no coöperation among men, outside of the membership of each immediate family circle. All the necessities of the family must be supplied by the labor of its own members. Each man is a "jack of all trades," good at none and having but little time for any. It is a state of savagery in which men have not the means of systematically engaging in the production of food. They must dispute with the wild beasts for possession of the woods and common feeding grounds. During the family stage of industrial society we find three principal sources of food. This chapter will describe briefly the first and most primitive method of getting a living. It belongs to the earliest and most primitive stage of isolated family life. We will afterward proceed to ascertain the progressive methods of enlarging the sources of subsistence. "The great epochs of human progress have been identified, more or less directly, with the enlargement of the sources of subsistence." This is a fact of such pronounced importance that much attention must be given to it. A large part of the discussion in descriptive economics is properly devoted to it.

The Frugiferous Subsistence.—Men were first of all fruit and nut gatherers. They were like the wild animals, living on the spontaneous fruits of the earth. It was a precarious subsistence upon berries, wild fruits and nuts, such as the bounty of nature afforded. It was a more bitter struggle for existence than we can now comprehend. Each member of the family, must necessarily have entered into it. The young as well as the old took a part, just as the young of animals are turned adrift to seek a living.

A Prehistoric State.—Few, if any, evidences of peoples in this state have been found within historic times. The savage races discovered by travelers have usually passed to a higher economic plane. The structural organization of men is omnivorous, and the strictly frugiferous subsistence is unnatural. Several tribes of savages exist, however, which nearly approach the condition of frugiferous subsistence. A French traveler, M. Chaffaujou, discovered near the sources of the Orinoco a tribe of Guaharibo Indians whom he described as living without clothing, houses or tents, "feeding on large worms which they scraped up with their nails, and on seeds and palm shoots which they severed with their teeth." There are savages roaming the virgin forests of Central Borneo much after the manner of wild animals. "At night they take shelter under some large tree where they light a fire to keep off the wild beasts; the children are hung up amongst the branches." The Curumbus of the Neilgherry Hills, one of the hill tribes of India, are described as living mainly on such vegetable subsistence as nature throws in their way, and lacking sufficient skill and intelligence to procure anything else.

A Restricted Habitat.—The portion of the earth's surface which could be occupied by men subsisting in this way is necessarily small. Only a tropical climate and a country richly endowed with vegetable life would admit of it. The body is usually deformed, and the period of life is short owing to the ravages of disease. Were it not so, death must come in the more horrible form of starvation. There must necessarily in all climates be periods when spontaneous fruits are scarce, and at such times the edible roots which can be procured, with plants and fungi thrown in, will barely provide sufficient nourishment to sustain life. As population grows, the supply will fall short. There are many savage tribes of the present day, however, who are at times obliged to resort to this subsistence. When animal food fails, Fuegians and some American Indians are glad to resort to berries, bark and bulbs.

CHAPTER III.

THE FISHER AND HUNTER.

The Second Economic State.—We have just seen that in relation to subsistence, the first economic state of mankind is one in which sole reliance is placed upon the spontaneous products of nature. It is a natural subsistence upon fruits and nuts. Men starved on its parsimony, or feasted on its bounty, as the case might be. This is the first stage of industrial society in so far as the source of subsistence and the means of procuring it are concerned. In the second economic state men are not wholly dependent upon the fickleness of nature. They have gained some slight conquest over it and have learned to use some skill and some force in procuring what is not spontaneously brought to hand. It is the fisher and hunter state and represents that stage of industrial society in which men have added to their food resources, the products of the chase. They still use the spontaneous fruits of nature, as in the first state, but now they add to them, by the use of skill and force, and the larder is increased accordingly. The idea of conscious labor commences to play a part in daily life.

The Fisher First.—It is of no sort of consequence whether men first enhanced their material welfare and enlarged the sources of subsistence, by fishing or by hunting. In some places perhaps the art of hunting was first practiced, and in other places it was the art of fishing. The seas and rivers, however, were the "first avenues for the progress of civilization and industry" and the early centers of population were about the sea shores. It is a natural conjecture that shell fish were largely a source of subsistence before land game became a factor in getting a living. Kitchen middens, or shell mounds are found along all the coasts of the world. They are also found in the interior of the continents along the shores of the prehistoric inland seas. Shells are frequently found, along with the remains of prehistoric man. The shell fish is easy of capture, and in primitive

times was abundant in quantity. But little skill was required to procure this form of subsistence. Shell fishing does not require the exercise of the hunter's craft, and it is not difficult to understand that primitive men were first attracted to it when fruits and nuts failed. It is still the principal source of subsistence of the Fuegians and also of some of the Australian tribes.

Small and Large Game.—The true hunter state doubtless began with the conquest of small game, such as birds and the smaller mammals. The club which was used to knock down nuts from the tree could easily have been used to knock down a bird, although it may have taken ages for primitive man to attain to the second occupation from the first. The capture of large game presupposes quite a victory over the forces of nature. It is the result of years of effort. The hunter must know the habits of his game, the species of food which it desires, its feeding grounds and all its characteristics. To acquire this knowledge required patient observation of the ways and means adopted by the carnivorous and rapacious animals in their pursuit of the art of hunting.

Greater Certainty of the Hunter's Subsistence.—The subsistence of the hunter is much more stated and sure than that of the fruit and nut gatherer. The hunter state is a marked economic step in advance of the frugiferous state. The hunter while following his avocation can procure frugiferous subsistence also. His game goes to make up the entrées and extras of his bill of fare, and between them starvation is less likely to occur. His subsistence, moreover, is not only more stated and varied, but more nourishing. Physical endurance is increased, and the physique is developed.

Enlargement of Habitat.—The fruit and nut gatherer relying wholly upon a natural subsistence of fruits and nuts, to be had for the gathering, was limited as to the place of his habitation, by climate and physical environment. He could not live in the temperate or northern climates, but must confine himself to tropical zones where nature is prodigal. But when he had acquired the art of hunting and fishing, the territory over which he could roam and find a living was greatly enlarged. He could follow the seas and rivers where he would

always be near the fish. He could go wherever game abounded, although fruit and vegetables suitable for consumption might be scarce. The winter season especially was robbed of some of the terrors which characterize it when the source of subsistence is frugiferous.

Recurring Famines.—Notwithstanding the decided betterment of the condition of mankind upon entering the hunter and fisher state, there is oft and constantly recurring famine. There are times when game and other food fail. Dr. Kane's description of the result of a famine at Etah is an illustration. Instead of "plump, greasy children, and round cheeked matrons," the explorer saw "lean figures of misery" and men who looked hard and bony. In the whole community there was only the skin of a young sea unicorn left. All the dogs but four had been eaten. There were no lights, for the blubber had been used. Those who know it best, know that the hunter state is a struggle for food of the keenest kind. Often a squirrel or bird will answer to "qualify or season a gallon of soup." The Indian hunter, in order to provide sustenance for himself and family, arose at daybreak and tramped the forest until dusk. If he was unsuccessful he returned to his couch of cedar branches and rush mats, only to rise at dawn and commence the weary tramp again. Instances are related where the head of the Indian family has patiently hunted day after day until he has fallen in the forest and died of starvation. He dreams of the happy hunting ground because there he will no longer know the acute pangs of hunger. The missionary Lejeune, sitting around a camp-fire on the present site of Montreal, heard an Indian legend about a young brave who climbed a great tree and went hunting in Heaven. The legend illustrates the state of the hunter mind stamped with the impress of chronic hunger.

CHAPTER VII.

THE HERDSMAN.

Animal Domestication.—Following the hunter and fisher state, the next great movement in the economic progress of mankind relates to the domestication of animals. It is quite a step in advance when men pass out of the frugiferous into the hunting and fishing state, but the economic transition involved is not as important as that connected with the advance from the hunter state to the pastoral state.

The Shepherding of Animals.—Reference has already been made to the practice of the ant of procuring subsistence from the Aphides. According to the naturalist Espinas, the industry of the ants amounts almost to the systematic breeding of the Aphis. The Aphides are either coaxed or forced into the nests of the ants where they are fed and sheltered, and where they lay their eggs. The ants take care of the eggs, licking them as tenderly as they do those of their own kind. We are not to assume that animal industries of this kind, or of the character referred to in previous chapters, are on a footing with human industries. They simply furnish food for thought, and while much animal industry may be, and probably is, the result of instinct and not of forethought and consciousness, yet we may expect to find in it the prototype of human industry, or, as we have already called it, the far-off prophecy of economic conditions existing among mankind.

The Beginning of Animal Domestication.—The hunter slays the dam and spares the offspring. At first the young one may be saved and reared, more as a pet and companion, than for any material use. It is not likely that the idea of advancing material welfare by domesticating animals came into the minds of primitive men until long after domestication became an accomplished fact. The first economic use of animals doubtless related to assistance in hunting. That being the chief avocation of the time, any new art or discovery would likely refer to it. Some of the Australian tribes, when first

described, had tamed the wild dogs of the country and trained them to assist in the chase. The American Indians at the time of the discovery had their hunting dogs. Travelers who have visited the Fuegians have found it worthy of remark that the people use a race of dogs trained to dive in the water and catch fish. The Tartars have taught the falcon to hover over the heads of the wild horses of the Steppes, and by fluttering their wings in the eyes so confuse the poor brutes as to allow of the hunter's approach. These illustrations serve to show how success in the chase is greatly enhanced when the hunter has called the brute creation to his aid. His labor becomes more efficient and the hunting ground more productive.

Domestication for Food.—Having once acquired the art of domesticating animals for their assistance in the chase, it would not be a great step in advance when men domesticate them for food. The idea would be suggested if it were found when famine has come upon the hunter family, that the brutes which had been trained to help in the hunt would answer to prevent starvation. The dogs of the Fuegians are a last resource, and so it is with the Esquimaux.

Domestication for Transportation and Travel. — The idea of domesticating the wild animal for the purpose of utilizing its physical powers in daily labor would dawn very slowly. It would doubtless not take shape until ages after men had domesticated animals for the chase. This stage of domestication has recently been reached in Siberia. The reindeer is found there both in the wild and in the domestic state. The Laps and Siberian tribes both hunt and train it. It furnishes food, clothing and shelter. It affords the only means of transportation and communication between various parts of the country, and without it, life would be almost impossible in portions of northern Siberia. It is the sole source of subsistence of the northern tribes, as the Tungas, supplying all their necessary economic wants. These people are living examples of the economic condition of man when he is both hunter and herdsman. They are in the reindeer age. When New England was still coated with the ice of the glacial epoch, its inhabitants were in the reindeer age. A higher kind of pastoral life, and

one which is a notch higher in the economic scale, is that of the nomadic peoples shifting their tents on the steppes of Central Asia or the deserts of Arabia, and driving their herds of oxen, sheep, camels and horses before them in search of pasture. It is the kind of life described in the book of Genesis. It is like that lived by all eastern peoples during their infancy.

Domestication for Agricultural Purposes.—The application of animal strength for the purpose of tilling the soil and carrying on agricultural operations, belongs to the last and highest stage of animal domestication. It does not come until long after men have acquired the art of putting animals to the uses of the chase, of a food supply and of transportation. It relates to a more advanced economic state than we are now discussing. Men were not agriculturists until long after they were herdsmen. When we come to study the economic life of the agriculturist, we may think of him as having once been a hunter, using the horse in the chase, instead of before the plow.

The Number of Indigenous Animals Affecting the Pastoral Life.—There have been peoples who have passed from the lower economic states to the higher without having practiced the pastoral life. Supposing the pastoral state to represent an economic state between that of the hunter and the agriculturist, we find that some peoples have never lived in this intermediate state. And again there are peoples who have lived a partially pastoral life; that is, they have domesticated and employed animals for perhaps only one or two of the specified purposes. They may have used animals as assistants in the hunt, and may have used them as a permanent source of food supply, but not for transportation or tillage. The number and character of the animals capable of domestication, indigenous to a country, is said to produce these phenomena. The use of domestic animals must depend upon their distribution. This would seem to be a fair explanation of the fact that some peoples have lived only a partially pastoral life. If the domestic animals are not native to a country, its people cannot be expected to domesticate them and employ them in economic activity. The highest forms of pastoral life, from an economic standpoint, have developed in the Eastern hemisphere. But the

Eastern hemisphere had nearly all the domestic animals. It had the horse, cow, sheep, goat, and ox. The Western hemisphere had only the llama, turkey, and dog, and when Columbus discovered it the Indians had fully domesticated them and were putting them to all the economic uses of which they were capable. These races may therefore be said to have attained the highest pastoral life which their environment permitted. The distribution of the domestic animals is not a perfectly satisfactory explanation of these questions, however. It assumes that the animals which we know as the domestic animals are the only animals capable of domestication. When we find a race which has lived only a partially pastoral life, or which has passed from the hunter state to the agricultural state without passing through the pastoral state, it will frequently be found, on closer investigation, that it has not been left to itself to work out its economic salvation and climb the economic ladder in the natural way. It has been brought in contact with a higher civilization, and with a bound entered into the economic life and passed to the higher economic state of that civilization. The possibilities of adding to the stock of known domestic animals, referred to in the following paragraph, will further illustrate this subject.

New Domestic Animals.—The process of animal domestication requires ages for its development. Only long continued and patient effort succeeds. There must be a constant and pressing need for the aid of animal powers in order to keep men to the sticking point. We need hardly expect, therefore, that animals which have not been domesticated in the ages of the past will be brought into a state of domestication in the future, for the simple reason that the need of new domestic animals is not keen and urgent, and there is little inducement to make the attempt. The zebra and quagga are just as capable of domestication as the horse, but the horse answers all the purposes of man, and nothing would be gained by domesticating the zebra or quagga In this connection it is interesting to conjecture whether the American Indians would have domesticated the bison if they had been left in undisturbed possession of the continent. It is even of more interest to ponder on the

economic results had Columbus found the buffalo already domesticated. It is not impossible for the animal to have become an important factor in national wealth. The meat of the ox was once coarser and more unpalatable than the meat of the wild buffalo. Domestication would have improved the quality of the meat and resulted in an increased, permanent source of food supply. The buffalo would be on its native heath, and the severe winters which have proved destructive to cattle ranching in the west would have little terror for the buffalo ranchman. We might, with profit, indulge in the same speculation with reference to the higher pastoral state to be assumed by the African tribes if left to themselves, for the lapse of the ages required to domesticate the zebra and quagga and bring them to the stature and perfection of the horse. The profit of such speculation consists of the side light thrown upon our study. It gives us a clearer appreciation of what we once were and what our economic condition was when the race was in its infancy—how we have become what we are and how we have reached our present economic life.

The Second Triumph over Nature.—The first marked triumph which man achieved over the forces of nature consisted in his acquisition of the art of hunting. We have seen how his material welfare and economic conditions were bettered when he entered the hunter state. How much greater was the betterment when he entered the pastoral state! He has now achieved his second triumph.

Milk and Meat Subsistence.—As hunters, men added the products of the chase to the spontaneous fruits of nature as a source of subsistence, but even with such addition, subsistence was scanty and uncertain. In the pastoral state, however, there is the further addition of a stated supply of meat and milk. It is reasonably sure. If natural fruits fail and game is scarce one of the herd can be slaughtered. The domestic animal can forage and preserve existence where wild game does not abound, and where there are no vegetable productions suitable for man.

Enlargement of Habitat.—In the pastoral state there is only a small part of the earth's surface which man cannot

inhabit. In the frugiferous age when he lived on the spontaneous fruits of nature he was limited to a very restricted habitat. With the entrance upon the hunter state his habitat is enlarged. Up to that time, however, subsistence abounds only in a well watered, forest country. Now that he has become a herdsman and shepherd he can spread out and occupy the plains and the deserts. He can go into regions of inhospitable climates. By the addition of meat and milk subsistence, the supporting capacity of a territory is greatly enlarged. The area over which one hunter must roam and be left in undisturbed pursuit of the game, in order to get a living, will support many men who are both hunters and herdsmen. It has been claimed that the average huntsman requires fifty thousand acres for his support.

Material Advancement.—The advancement of man's material welfare by his entrance upon the pastoral life cannot be easily over-estimated. Food is not only more stated and sure, but so also are clothing and shelter. There are many peoples who still dress in sheepskins and goatskins, and make their tents of raw hide. When the Spaniards colonized the western hemisphere and introduced the horse, the Patagonians were in the rudest hunter state. Within thirty years afterwards they made use of the horse which the Spaniards had brought, and being mounted for the chase they were enabled to capture the native guanacho in quantities entirely sufficient for food. The average stature and longevity immediately increased and they became a fairly well to do race.

Famines Still.—It appears that the pastoral life is not without its times of scarcity. The multiplication of the herds which must keep pace with the growth of population overcrowds the pasture. The time comes when the people cannot be fed "by the mere pasturage of land." Prior to that time, moreover, diseases which the rude intelligence of the time cannot successfully combat, thins out the flocks, and recurring droughts leave the animals without sustenance. Herdsmen are early and often acquainted with famine. They must separate, as bees at swarming time, and be keenly alive to provide fresh grass and water for the wants of their animals. The pastoral

life, with its milk and meat subsistence, superadded to all the forms of subsistence which have preceded it in the order of development, will not support a nation and satisfy its economic wants without frequent famines.

CHAPTER V.

WANTS AND EMPLOYMENTS OF FAMILY ECONOMICS.

A Nomadic Life.—A marked feature of the stage of industrial society which we are studying—that stage in which the economically isolated family is the highest type—is the nomadic state in which men live. They are nomads, wandering hither and thither in search of subsistence. They have no permanent and fixed abode. It is camp life, and the camp is a temporary rendezvous. It is occupied as long as the berries or game of the neighborhood last, or until the pasturage gives out.

The Wants of Food.—The food which the nomad wants is simply that which will fill the stomach and satisfy his hunger. So long as there is enough of it to sustain life, little objection is made to quality. It is true that while the comforts of a stated sufficiency, and of the increasing nutritive quality ascending from the frugiferous state to the pastoral state, may be appreciated, yet the wants of food in the family stage of economics relate mainly to the necessities of life. The economic activity of the nomad seeks to satisfy necessary wants. Comforts of food come into demand at a later economic stage.

Nomadic Cookery.—We have noticed that a distinguishing feature between man and the lower animals is the development by man of increasing wants with increasing civilization. Animals have the same wants in all stages of evolution. Another distinction lies in the fact that man is a cooking animal. Economics has little to do with the prehistoric times when men did not know the art of fire making and the art of cooking. Of course, in the beginning, cookery is in a very rude state. It begins with roasting before the fire. The next step is roasting in the ashes or hot earth; finally a hole is excavated and filled with hot stones, and a fire built over it. A primitive oven is a hollow tree in which the Andaman Islanders build a fire and roast wild pigs. A better oven is an ant hill, from which the

Bushmen drive out the ants. Boiling comes comparatively late in life. It is first performed by putting hot stones into a vessel of water. The Assiniboines got their name because they were boilers. They took the paunch from the game, filled it with water and put in hot stones. With the introduction of the art of boiling, the available food supply is greatly increased, because many articles which will serve for food if properly cooked can not be cooked in any other way. All nomadic cookery, however, is crude. It is extremely wasteful, and a large portion of the food is necessarily spoiled in the cooking. As the economic condition of mankind develops, it is interesting to note how health is preserved, life prolonged and material welfare promoted by the evolution of cookery.

Wants of Clothing and Shelter.—They are even more simple than the wants of food. Anything will answer which will ward off cold and the blast. The clothing of the hunter is better than the clothing of the man who lived on the spontaneous fruits of nature, and the hunter is more sure of getting his clothing. With the advent of the pastoral life, clothing of a still better quality is to be had. As to shelter, nomads rarely want a permanent structure for habitation the year round. In tropical countries the structure is simply some bushes thrown together, or leaves spread on an awning of poles. Some skins hung on the bushes to windward may answer. In the pastoral life tents come into vogue. They are readily made from the hides of the slaughtered animals. In climates where the winters are severe, some more permanent habitation must be constructed to be occupied during the winter season and abandoned with the advent of spring. As a rule, however, the nomad spends but little labor in house building. Game or pasture is liable to fail at any time, and he must move on. Sometimes, as among the Klinkaths of the northwest coast, house posts are erected and left standing at different places, and when the people are obliged to migrate they simply take the covering. It is a great step in advance, however, from the time when men lived in caves, as animals burrow. The state of house architecture among a people is a fair criterion of their economic condition. We would expect a people living in huts to be in a state of sav-

agery, just as we suppose that well appointed and comfortable houses belong to a people having attained a high economic state.

Avocations of Nomadic Life.—It is sometimes said that in the family stage of economics there are two employments, and they are such as belong to the two sexes. In other words, that the men do everything but the cooking. This is hardly true, because among all rude peoples the women perform almost as much general labor as the men. An Australian traveler tells how he saw a group of women taking turns in diving from a rock after mussels. After they had gathered a small basketful, they carried them to the camp fire around which the men were lying. The labor performed by the Indian squaws was such as is now performed by men. On the other hand, men also were cooks. The fact is, every person was berry picker, hunter or herdsman, as necessity demanded. We have not yet reached the time when a person followed one avocation. In the family stage of economics, each member of the family is "jack of all trades." Each member takes his turn in all the activities which go to make up the aggregate economic activity of the family. There is no division of employments. There is no dependence of man upon man, nor is one family dependent for any portion of its wants upon another family, or upon the economic activity of others.

The Lack of Wants.—Each family consumes within its own family circle what it can produce, and that is not always enough for its necessities; and although we may presume that men have always had some wants of a higher character than wants of necessity, yet the chief wants of the isolated family are primitive and easily satisfied. Men labor in order to obtain necessities. They do not labor to procure comforts. There is little associated effort among men to overcome the forces of nature. So long as this state of things continues, there is little progress toward the higher economic stages. Savagery perpetuates itself in the heart of Africa, because the people have few wants. This perpetuation of savagery is a violation of nature, not a conformity to it. It is not a natural condition nor an illustration of a law of nature, because the law of nature is to grow out of the state where there is a lack of wants, to a state where there is a con-

stant increase of wants. A modern-day illustration in our own land is found in the low economic condition of the freedmen in the South. There is a lack of wants among them. They are too easily satisfied with the bare wants of necessity. Let one of them get the notion that he wants comforts—that he wants better food, a comfortable house and modern conveniences, and he is sure to rise rapidly in the economic scale. "Man shall not live by bread alone." The mind as well as the stomach must be fed, and must have wants.

CHAPTER VI.

THE CAPITAL OF THE FAMILY.

Hoarding by Animals.—Many animals hoard their savings and store a surplus. They get together a fund of supplies for use in time of want. Squirrels are exceedingly industrious when food is plentiful. There are species of ants which gnaw off plumule and radicle, and stop the germination of seeds after it has commenced, so that they may be kept for future use. Like a thrifty housewife, they preserve food for the winter. Ants and bees store for their offspring. The burrowing beetles unite in digging a hole for a bit of captured food of which there is no present need, just as a dog buries a piece of meat which he cannot eat. A remarkable instance of the hoarding habit of animals is given by a writer on animal life, who describes how the sphex-wasp paralyzes a cricket or other insect by a sting, and puts it in the chamber with her eggs where it may "remain alive as fresh meat for the sphex larva when that is hatched." Examine a web of the common spider and you will find a magazine of house flies.

The Capital of the Nomad.—"A rolling stone gathers no moss," and nomadic man gathers few goods. The habits of nomadic life preclude storing or hoarding for future use and consumption. Everything must be carried about. For a large portion of the year camp is broken daily, and the fewer the belongings, the less hindrance to travel. Sir Henry Drummond states that in the heart of Africa he saw a savage buried with all his capital. It consisted of a pipe, a rude knife, a mud bowl, some arrows and a bow with its string cut in twain; and the author adds: "We were so once; they may be what we are."

Weapons.—We come to another distinction between men and the lower animals. Man is a tool making animal. Of late years, however, it is claimed that this distinction is not conclusive, because some of the anthropoid apes get hold of a favorite club or bludgeon and use it in the arts of life for a

considerable length of time before throwing it away. But man alone evinces forethought, skill and deliberation in the construction and use of tools. Weapons, both for offensive and defensive warfare and for use in the chase, are the first forms of capital. They are the investments of primitive man—the product of his labor designed for future use, at a time when he is not as forehanded as those animals which store up food.

Progressive Forms of Capital.—After weapons come simple utensils used in preparing food. The storing of food itself, for future consumption, does not come until long afterwards. In the family stage of economics it exists only in a very rude form. When men attempt to live in northern climates, however, they must, to a certain extent, gather together a supply of food for winter use unless they are in a pastoral state. Few of the North American tribes made other than rude attempts toward accumulating supplies, and consequently the winter season was one of extreme hardship and suffering. These tribes illustrate the family stage of industrial society. At this stage, flocks and herds are the highest form of capital. As a rule everything is produced for immediate use and consumption, and everything must be transportable. Men preserve and breed the domestic animals because the animals can transport and take care of themselves.

Community of Capital.—These are the days of communism pure and simple. Letourneau in his work, *The Origin and Development of Property*, advances the idea that even the weapons of primitive men are the common property of the family. In the hunter state, the game is common property and there are strict rules and regulations for its division among the members of the family. Most of the Indian tribes had well defined rules for the division of the various parts of an animal killed in the chase, or, if more than one animal was killed, for a division of the whole. Among some of the Australian tribes the principal hunter, when the forequarters of a kangaroo fall to his lot, must take "the head and neck, with another joint, cutlet and fillet, and hand it over to his father-in-law." The rest must go to his father; but these in turn must make a final division of the meat among the other

members of the family. If the hunter spears a large fish, the tail end belongs to himself, and goes to his branch of the family. The other part falls to his wife, and she divides that among her relations. The flocks are always the common property of the family. House structures were also common property. The long house of the Iroquois was sometimes from twenty to thirty feet broad, and eighty to one hundred feet long, and was subdivided into apartments. It belonged, however, to the gens or clan, which was an economic family, and each member had an interest in it. There was not only common property in the house, but also common property in all such provisions as might be on hand.

A Good Reason for Community of Capital.—In the early economic stages there is ample reason for community of property and family ownership of the various articles which have to do with the family subsistence. Private ownership of property is not yet established. We are not to understand that peoples living in a state of savagery and barbarism object to private ownership of property on any of the so-called moral grounds commonly advanced by modern thinkers. They don't say it is wrong. They say a man may have what he can retain in his possession. But the struggle for subsistence which men are waging with wild beasts is not calculated to create respect for the weaker or to cultivate distinctions between mine and thine. It is rarely, therefore, that a man can retain property in his possession without the assistance of the members of his family. That which requires the united strength of the family to retain will naturally be the property of the family, and each member will have a proprietary interest in it. In the early economic stages there is community of property, therefore, because right of property is founded simply upon possession, and it is a constant conflict between family and family, tribe and tribe, horde and horde, for the retention of possession.

The Number of the Family.—Just here it will be well for us to see that we have a clear conception of the scope of the term "family," as viewed from an economic standpoint. In another chapter enough was said to make clear the meaning of the term "economic isolation." Something may still be un-

said, however, to make clear the economic meaning of the term "family." It may include only the father, mother, and children. As a rule, however, it includes many others. Moreover, it may not be composed wholly of related individuals. Ethnology recognizes the Consanguine family, the Punaluan, the Syndyasmian, the Patriarchical and the Monogamian families. The Economic family is none of these. It is composed of a number of individuals who, irrespective of any ties of consanguinity, unitedly engage in the struggle for a living. The union is a strictly economic one, without reference to social or political institutions. The economic activity of each member is co-extensive with and of the precise nature of that of every other member. There may be few or many members. The economic family, therefore, includes the tribe and the nomadic horde. It includes any aggregation of individuals, closely uniting their economic activities in the art of getting a living, and pursuing them independently of all other individuals or aggregations of individuals. Each nomadic band, group, tribe or horde produces within its immediate circle and exclusively by the labor of its members all the things which satisfy its economic wants. Whatever its political or social ties or institutions, therefore, it is an economic family. The division is made solely on economic lines and irrespective of ethnical or political considerations.

CHAPTER VII.

PRIMITIVE BARTERING AND MANUFACTURING.

Another Human Characteristic.—We have from time to time noticed that there are economic characteristics common to all animals, including man. It is quite the rule to find some evidences, though they may be slight, of the existence of nearly all the primary economic conditions among the brute creation. Now and then, however, we study animal life in vain to find signs of some of those conditions. The matter of bartering or exchanging commodity for commodity, is one of the instances. Honey laden bees are known to divide their spoil with hungry comrades. There are some species of ants which do the same thing, and do it habitually and consistently. The process is thus described: "The ant who feels the need of food begins by tapping her two antennæ with a very rapid movement upon the antennæ of the ant from whom she expects succor. Immediately they may be seen approaching each other with open mouths and extended tongues, for the communication of the liquid which one possesses, to the other. During this operation the ant who receives nourishment does not cease to caress the friend who is feeding her, continuing to move her antennæ with singular activity." These instances and others of like character are sometimes cited to prove that animals make exchanges. It is not, however, an illustration of bartering, or exchanging. It rather illustrates community of property, and common ownership in the fruits of labor. Adam Smith long ago said that man is the only animal which makes exchanges. Subsequent investigation has disclosed no fact tending to throw doubt upon the correctness of his statement.

Barter in Game.—Food is the first article of barter. The territory occupied by one nomadic band may be better supplied with some article of subsistence, than contiguous territory occupied by another band. A change of diet is the first incentive to barter. A market in Africa may be wherever two bands meet beneath the trees, each having a surplus of food of differ-

ent kinds. A band of Ashangoes, for instance, who live mainly upon fruits, and are poor hunters, may meet a band of Obongoes, a forest tribe of hunters, and a bunch of plantains may be exchanged for a monkey. It is almost a rule, however, that barter of this character, as well as all barter which may be carried on in the early stages of economics, is an exchange of the surplus of the spontaneous fruits of nature, or of good fortune in the hunt. Primitive men do not gather fruits, or labor in the chase, to procure a surplus for the purpose of barter.

Barter in Weapons.—After barter in food products comes barter in weapons—weapons of the hunt or of war. In this case also, the natural productions of a territory have something to do with the acquisition of a surplus. One tribe, by reason of the existence of more appropriate materials in its territory, is enabled to produce a more effective weapon than its neighbors. Some of the South American tribes have become noted for their make of blow gun. Others have almost a monopoly of the manufacture of the poison with which the blow gun arrows are tipped. It is a tribal secret. Exchange of various commodities in return for this poison extends nearly across the continent.

Barter in Domestic Animals.—Passing from the hunter state to the pastoral state, men have a largely increased stock of ready capital with which to barter. They no longer depend upon the fortuitous bounty of nature for a supply of commodities which can be exchanged for something which they want and do not have. Just as the pastoral life gave them a sure and certain meat and milk subsistence, so it gave them a greater variety of articles of diet, because animal possessions were ever at hand to barter for other things. In the state of industrial society, however, which we are now studying, barter was usually in food or in utensils with which to obtain food. Barter in ornaments belongs to a later stage and is between savages on the one hand and civilized or semi-civilized men on the other.

A Family Matter.—Economics of the family has to do only with barter between families. The term family, however, includes, as stated in the last chapter, the anarchic band or unorganized horde which, economically speaking, is only an

enlarged household or family. Barter is controlled by the band, and it is a matter of which the band takes cognizance. It is transacted with more or less ceremony and formality. The historian Bancroft tells that among the Indians of the northwest, when one tribe desires to carry on barter with another, the commodities which it desires to exchange are left on the river bank. The other party to the transaction comes and surveys them. If they are desired and are satisfactory they are taken away, and commodities which would make a fair exchange are left in their place. Among the Nubians when two bands determine to trade, each side is drawn up in battle array and individuals selected by the several bands carry out the transaction between the lines.

Discouragements of Barter.—It took centuries for men to acquire the art of bartering, just as it took them centuries to acquire the other arts which have marked their economic growth. Bartering is not brought to a system until a higher and later economic stage is reached. There are several reasons why bartering among primitive people is uncertain and desultory. Chief among them is the fact that all property is owned in common by the family or band. Each member has a proprietary interest in all the productions of the family and in all the possessions of the family. This common ownership extends to the game and the flocks, and even to the weapons. The individual members of the band, therefore, can have nothing to say, and are not concerned in the matter of bartering. This explains why the whole band or horde regulates trade. Another reason is because of the lack of security in the possession of property. There is mutual distrust between family and family, and between band and band. Might makes right, and possession is "nine points of the law." The individual has no private property, because he can not hold on to it and defend it, and for this reason the band owns the property in common. Again, barter is limited, because transportation is limited. There is a lack of what has been called transmissibility—the ability and power to transport and transmit goods and commodities from hand to hand. There is also a lack of diversity of commodities for exchange.

The Beginning of Manufactures.—The time comes in the history of every people when they acquire more or less skill in some one direction. When the tribe comes to be known for its brand of weapons, barter in them arises. But among the members of the band certain individuals possess greater deftness and skill in manufacturing than their fellows. By continued application they develop their native skill. Their manufactures come into demand, not only in neighboring bands, but in their own band, and the industry of weapon making comes to exist. Longfellow's "ancient arrow maker" is the type of the tribal artisan. He is represented by the poet as:

> "Thinking of the great war-parties,
> How they came to buy his arrows,
> Could not fight without his arrows."

Judged by his first attempt at manufacturing, man seems to be but little higher in the scale than the beaver, the ant and the bee, which labor in common and own the fruit of their labor in common. When we see, however, that man has in him the germs of something better—the propensity to manufacture, and to barter his manufactures for other wants, then we see that he is far higher than the beaver, the ant and the bee. Theirs is instinct. It enables them to produce a perfect manufacture and a mechanism most suitable for its purpose at the first trial. Man's art is the result of intelligent reasoning, and when he puts his propensity into operation there is no comparison. Having once exercised this propensity for tool making and manufacturing, men discover that it is easier for some of them to get a living by bartering the results of their skillful labor, for food and game, with those who are better hunters and shepherds. When the Dutch and English traders opened communication with the tribes of the western continent, the Indian quickly found that it was better for him to barter his furs for a ready-made coat, blanket and leggings, than for him to make them.

CHAPTER VIII.

A SUMMARY OF THE CHARACTERISTICS OF FAMILY ECONOMICS.

Reasons for a Résumé.—Some of the economic characteristics relating to the first stage of economics, which have been under discussion in part one of this book, are worth reiterating. They lie at the foundation of all economic study, and a clear understanding of them will be necessary in order to render pleasant and interesting the succeeding and more difficult parts of the book, relating to the successive and higher economic stages. There are some characteristics worthy of mention, which have not yet been discussed.

The Resistance of Nature.—One of the principal factors determining the economics of the family is the resistance of nature. Primitive men are bewildered in the presence of natural forces. They have not the knowledge, the skill nor the unity to overcome these forces. In the economic stage to which we have thus far progressed in our study, the highest art which men practice in their struggle for a living is the domestication of animals. Animal domestication, it is true, places the men who follow it, far in advance of the men who depend upon the spontaneous productions of nature, yet the shepherd and herdsman know what it is to hunger and famish. The field, the forest, and the mine are rich with treasures, but men do not know how to find and use them. The cotton grows wild, but they go unclothed. The mine contains fuel, but they are cold. The means of subsistence are scanty. They bear an exceedingly close relation to the necessities of life. It is a hand to mouth existence—an existence of poverty, isolation and lawlessness.

Lack of Association.—Men have not learned to associate their intelligence, skill and strength. It is an age of distrust. Violence rules, and warfare is followed as consistently as the hunt.

Community of Living.—One man is too weak to face the struggle of life alone and protect his wife and children, and

therefore men band together in large households, usually of related families. So far as economics is concerned, the whole band may be considered as an economic unit—an enlarged family. It is not only community of house life, but community of labor, and absolute community of ownership in all the products of labor—in all the supplies and possessions of the band. In the beginning man has no greater control over the production of food than other animals, but when a number of them have united to form the anarchic horde, their power to increase the sources of subsistence is enlarged. The growth of this power as we shall follow it, determines the growth and existence of men upon the earth.

Centers of Population.—A region rich in natural productions became a center of population. The existence of fruits, of game and of pasture were the conditions demanded. A center of population required running streams and forests, interspersed with fertile valleys and plains or openings. There were hardly more than three such places on the western continent. One was the Columbia River valley; another was the lower peninsula of Michigan, including the lake region of Minnesota; and the third was the valley of Mexico. Each of these regions afforded many natural advantages for the existence of a primitive and nomadic population, and from each of them the population spread out. When the relation of the necessities of life to the means of subsistence became too close, a band wandered away and pushed out in search of food. When it found a suitable territory over which it could roam, it proceeded to occupy it until there again subsistence became scanty, and then it subdivided. This has been the process the world over. The western hemisphere is selected simply for an illustration. On the eastern hemisphere we can trace the original seats of population to valleys like those of the Nile, of the Euphrates, and of the Ganges. Regions of this character have been aptly termed the "nurseries of the race."

The Possession of Land.—Land plays only a minor part in the economics of the family. A nomadic horde or tribe, by force of might, laid claim, it is true, to certain territory as its hunting, fishing and pasture ground, but the limits of that

territory were loosely drawn and ill defined. It was like the territory which the lion or tiger claims for his own and from which all other beasts must keep out. Nevertheless, it represented the beginning of the ownership of land.

The Beginning of Invention.—We are quite apt to associate invention with historic or modern times, and economic writers, by common consent, have selected a certain period following the middle ages as that which is characterized by what is called "the industrial revolution." It is true that there have been specific periods when the progress of invention and industry has been more marked than at others—when human culture and the amelioration of the condition of the race have made great strides. Invention and the industrial revolution, however, really begin with the economics of the family. The invention of the fish hook must have resulted in great material advancement of the people who employed it. Who will say that the invention of the bow and arrow did not produce as great a revolution in the economic condition of men as any invention since? The art of pottery revolutionized the manner of living. "Man commenced at the bottom and worked up." He has gone from higher to higher arts of subsistence as he progressed. With each successive stage he has increased his power over the forces of nature.

The Saturnian Age.—The economics of the family relates to the Saturnian age. The wild freedom of the nomadic life is a fit subject for the fancies of poets. According to poetic notions it is a time when:

> "Ere the base laws of servitude began,
> When wild in woods the noble savage ran."

The poetic idea is misleading so far as the economic condition of mankind is concerned. There was a certain civil freedom, to be sure, but it was accompanied by poverty, hunger, cold and wretchedness. There was a certain independence of subsistence, an independence in which each family looked out for itself—an economic isolation. Frequently, however, it failed to bring the necessities and it never provided the comforts of life. The best provisioned and most luxuriously appointed American indian wigwam never had half the comforts common to the most wretched Bowery tenement.

PART II.

ECONOMICS OF THE VILLAGE.

CHAPTER I.

THE AGRICULTURIST.

Economic Significance of the Agricultural Life.— There is a Scandinavian legend of a giantess who saw a man plowing with a yoke of oxen. She picked him up, together with his plow and oxen, and putting him squirming into her apron, ran to her mother, saying: "Mother, what sort of a beetle is this that I found wriggling in the sand?" The mother cried out: "Put it away, my child. We must be gone out of this land, for these people will dwell in it." The plowman stands for a new and higher economic stage. The giantess and her child belong to an older and a lower stage. The representatives of the lower economy must give way to the representatives of the higher. The legend is intended to illustrate the inexorable rule that lower forms of economic activity are displaced by and subjected to the higher forms, whenever they come in contact. The working of the rule is especially noticeable when the newer agricultural life springs up beside the older pastoral life. The herdsmen cling tenaciously to their old ways of getting a living, but without avail. Tillage of the soil is sure to displace pasturage, because it is more productive and efficient. The contest which commenced about twenty years ago on the trans-Missouri plains, between the "cow-boy" who was pasturing the land, and the "granger" who would till it, has slowly but surely progressed in favor of the tiller of the soil.

The First and Second Economic Stages Compared.—The outline of the study of family economics is nearly completed. The economies of the family has been represented as being the first of the economic stages through which mankind passes. It relates to the beginning of industrial society. The term "Economics of the Family" is employed, because the family is both the unit and at the same time the highest form of industrial society. From an economic standpoint the household, the anarchic group, the nomadic band, tribe or horde, are families. Their economic life is isolated. There is no economic dependence of family upon family; of one domestic group upon another; of horde upon horde. As to sources of subsistence, the stage begins with a subsistence upon the spontaneous fruits of nature. Next a subsistence of wild game and fish is superadded. The stage ends with the milk and meat subsistence of the pastoral life. The struggle for subsistence—for the necessary wants of food—is the main feature of the first economic stage, and therefore, the economy of the family relates mainly to the sources of subsistence.

The second of the economic stages is called "Economics of the Village." The family or domestic group ceases to be the economic unit. Industrial society assumes the higher form of the village community. Economic dependence of domestic groups begins, and a larger body of individuals practice a mutual economy. The tillage of land begins to be the chief source of subsistence. No particular form of economic activity distinguishes the stages, or marks the transition from one to the other. The transition is by slow degrees, so gradual as to be imperceptible. There is no exact date when a people leaves one stage and enters another and higher stage. And then, too, certain features of family economy remain in the second, and even in the third of the economic stages. The last vestige of the family system disappears only when towns and cities have arisen, when merchants follow trading as an industrial occupation, and artisans devote themselves to manufacturing. Not until then does the family become wholly dependent upon the labor of persons not members of its immediate circle.

The Rude Beginnings of Agriculture.—Tillage had its

origin during the period of the hunter life. When game was scarce the hunter gathered the fruitage of plants. Chance seeds were dropped about the camp. Returning at a later season to the old camp ground, the hunter finds that the seeds have germinated and produced a "volunteer" crop. Most of the farinaceous plants grew wild in their native haunts, although in a very undeveloped state. For instance, in the shallow waters of American rivers and lakes north of the fortieth parallel, the *zizania palustris*, or wild rice, is found in the wild state. It once flourished in such quantities as to form an important source of Indian subsistence. It ripens in September, and with each returning autumn it was the duty of the Indian women to set out in their canoes, and paddling into the rice fields, gather boat loads of grain. It has been suggested that, if left to the course of nature, the Indians might have domesticated the bison and thus have added to the stock of domestic animals. So they might have reduced the wild rice to a state of cultivation and produced another farinaceous plant. In the course of time some of the grains would certainly have been scattered about a camp ground beside a lake or river. They would have rooted there, and the savage mind, so constantly in touch with nature, would have noticed the growth and profited by it.

Ages of Cultivation.—It might have taken the Indians centuries to develop a profitable agricultural plant from the wild rice plant. All of the farinaceous plants, and perhaps all of the plants propagated for food, have required centuries of cultivation to bring them to a perfected state. The maize or Indian corn, the chief of the food plants of the western hemisphere, is supposed to have originated in Mexico and thence spread northward. It was not found growing in the wild state with two or three fully formed ears to the stalk. Like the other farinaceous plants, it belongs to the family of grasses, and its progenitor was doubtless a rude grass bearing little fruit.

Indigenous Plants.—The order in which peoples have entered the agricultural life, and the extent to which they have engaged in agriculture, have depended upon the distribution of the food plants. Just as the eastern hemisphere was most

richly endowed with those animals which have proven useful and profitable for domestication, so it was most richly endowed with farinaceous plants. The western hemisphere had only one of those plants—the maize, or Indian corn. That one, however, as Mr. Lewis Morgan has remarked, was the best of all for primitive agricultural purposes, if only one was to be had. It grows in hills or with detached stalks strong enough to withstand the vicissitudes to which it will be subjected under a rude system of husbandry. Hill culture is best adapted to the character of primitive cultivation. When the western hemisphere was discovered, however, there were found under cultivation, besides maize, certain species of beans and squashes, and one or two minor vegetable plants. The distribution of the animals adapted to domestication has also some significance with reference to the introduction of agriculture. Where these animals were wanting, the inhabitants frequently passed directly from the hunter state to a rude agricultural state, without passing through the intervening pastoral state. Most of the North American hunting tribes were partially agricultural. They never pursued pastoral occupations. The horse breeding developed among the plains Indians was not a native industry, as the horse had become extinct at the time of the discovery. The Indians simply applied to their domestic uses the horse which the Spaniards brought among them, and the art of rearing was doubtless taught them by their visitors.

Nascent Agriculture.—The early practice of agriculture is rude and simple in the extreme. An open patch of alluvial soil is pricked with a stick hardened in the fire. The seeds are planted in a spirit of frolicsomeness and gayety. Anxiety for the welfare of the little crop is dismissed. If it weathers the drought and surmounts the weeds, it is gathered in the same spirit of playfulness. The main dependence of life is still on the herds and the hunt. A tourist who has been wont to camp in the summer, on the northern shore of Georgian Bay, has described the nascent Indian agriculture which he observed there. On the sheltered shore of a little cove, not far from the camp ground, an Indian had built a hut in an opening in the forest. The hut was never occupied during the

summer. Back of the house was a little garden, where in the rich black soil, the man, or more likely his wife, planted each spring time, a few garden seeds. There were two or three rows of beets, some onions, beans, a few hills of potatoes and corn. The fertility of the soil allowed them to hold their own against the rank growth of weeds. With the advent of summer the allurements of the nomadic life overcame the home desires of the planters. They evidently entered their canoe and followed the game northward, to return in the fall. This is the beginning of agriculture everywhere. It is not entered upon with a definite purpose of gaining a livelihood, but to eke out subsistence. It is the agriculture of the nomad.

The Growth of Agriculture.—Agriculture commences with the cultivation of an open patch of alluvial soil. It then extends to the cultivation of an enclosed space or garden. Up to this point the process of tillage is rude and ineffective. The agricultural implement is a sharpened stick or spud, with a fire hardened point. It develops finally into a sapling with protruding arms where the branches have been cut off. This is dragged over the ground by the cultivators themselves. Field agriculture, by means of a plow drawn by animal power, is a comparatively modern art. Sometimes the necessities of the domestic animals encourages cultivation. Such would be the case, however, only in those instances where the pastoral life reaches a high degree of perfection.

The Agricultural Stages.—We may here state in their order the various agricultural stages, down to the present. Although such statement involves matters not properly connected with the economic stage which we are now studying, yet the desirability of presenting the subject connectedly will offset an objection of that character. Economic facts of this kind, moreover, will bear repetition and may be mentioned again when reached in their proper place. The agricultural stages are as follows:

1. For want of a more expressive term the first stage may be called the tentative stage. In this stage men do not plant and till with a preconceived design of procuring a stated addition to their food supply. They employ no method and practice no

art by rule. The tillage is desultory. The location and extent of the ground which is cultivated depends upon the existence of open patches of soil, usually alluvial. It may be on the mountain side, in the wash of streams, at the mouths of rivers. The shape of the cultivated patch is irregular following the contour of the forest opening. It is cultivation in hills or groups. The hills are planted here and there, without order, wherever the savage thinks the plants will grow. The utter absence of any plan reminds one of the early native Florida orange groves, in which the trees are found growing without reference to order, as though the seeds had been dropped, or the young trees set, by chance. The planting is done as a byplay or diversion at the beginning of the season of vegetation and the plants are left to care for themselves until the approach of a time of need drives the planters to an examination of the crop. The crop is the common property of the community and is harvested, if there is a harvest, into a common granary.

2. The second stage is the open field culture. We have leaped over centuries in passing from the first stage. They are the centuries during which men have been acquiring knowledge of the fact that by systematic agriculture, they can procure a stated and sufficient food supply. The quantity of land tilled, as compared with the population of the community, has been gradually enlarged. By slow degrees, method has been introduced and husbandry developed. Very irregular method we should call it when placed beside our modern standard, but a great improvement upon the absolute lack of method in the first stage. The cultivated land is the common property of the village community. Stretching away from the village, sometimes from all sides, are the common fields. At first they are worked in common. Afterwards they are parceled out in equal shares among the members of the village. Custom regulates the allotment from year to year. In case more than one kind of crop is raised, custom determines the particular kind of crop to which each allotment shall be applied. The hitherto undivided, though irregular fields, are now subdivided into unenclosed patches or segments corresponding to the allotments. Often the chief or lord of the village gradually comes to get a

larger allotment than the others and becomes entitled to have his ground worked by them, or to receive a portion of their crops, in return for the privilege of the holding. The time comes when the members of the village have a proprietary interest in their patches of soil and the right to sell their improvements. Allotments cease. The pasturage is still common however. It is on the other side of the village, or beyond the cultivated fields. Each villager is entitled to pasture so many beasts on the common pasture. Common pasturage exists for centuries after the cultivated lands have become private property. It is "the commons" of our day. There are still "commons" of pasturage and of meadow land on the eastern end of Long Island and in parts of New England.

3. The chief feature of the third agricultural stage is the enclosed field. Of course, prior to this, small patches have been enclosed, adjacent to the villages, for horticultural and gardening purposes. The enclosures are to keep out the cattle when they are driven in from the pastures. There are frequent instances, moreover, of enclosures being made to keep out wild beasts, long before the community has reached the stage of field agriculture. Field agriculture is sometimes, in its beginning, a system of alternate cropping and pasturing, similar to the "convertible husbandry" which attended the agrarian revolution in England. It marks a breaking away from the one crop system and the introduction of varied agriculture. Where land is held by tenure, as is case of conquest, the cultivation is similar to that of the third stage.

4. The fourth and present agricultural stage is the rotation of crops stage. It includes the raising of many different kinds of crops by the tiller as well as their annual rotation from field to field. Pasturing for a season or two, at intervals of two or three years between crops, is usually a part of the system. This system of agriculture is such a matter of course with us that we are apt to lose sight of its economic importance. It delays that exhaustion of the soil which would speedily ensue with continued one crop tillage. It increases the average productivity of cultivated land. It ensures the agriculturist some returns in seasons when climatic and atmospheric influences

prevent some kinds of crops from maturing. In other ways it enlarges the stated food supply of the world. We can hardly understand the present economic condition of mankind and appreciate its superiority, without knowing what it has been and how it has come from inferior beginnings. To this end the plan we are pursuing has its advantages.

Thus in a general way, the various stages in agriculture have been presented. The descriptions which have been given are intended to apply to the average so as to be good the world over. If we were to state and describe, for instance, the agricultural stages through which England and its people have passed, without reference to other parts of the earth, more details would be necessary and the statements could not be so general.

The Second Victory over Nature.—We have called the domestication of animals the first pronounced victory of man over the forces of nature. The cultivation of plants for food is his second great victory. Until he has become an agriculturist, man never realizes the possibility in store for him, of a certain and unlimited supply of food. When he finds that he can till the earth and grow the cereals and cultivate plants, to an extent limited only by the existence of the arable soil, there dawns upon him the idea that he is no longer the slave of natural forces, to be baffled by drought killing the pasture, by winter, destroying game and the herds. He looks at mother-earth and sees the possibility of a great and sure food supply. He takes new heart, and thenceforth commences a career of real material prosperity.

Enlargement of Habitat.—When men enter the pastoral state, the sphere of their economic activity, as compared with that of the hunter state, is indefinitely enlarged. With the advent of the agricultural life the whole earth becomes man's dominion. He has then finally solved the question of his supremacy on the earth. His control over the production of food, so far as the enlargement of source is concerned, has reached its practical climax. It is easy to find illustrations of the relative high economic condition of a people living in the agricultural state, as compared with a people living in the lower

hunter state. The Navajos and Mohaves have the same ethnic origin as the Apaches. They are traced back to a common ancestry. The Navajos and Mohaves are in the hunter state. They are brutish, stunted and degraded. They are arrant, lazy cowards. The Apaches have a nascent agriculture, and do not depend wholly upon the chase. They have a varied diet and a source of supply when natural sources fail. They are of well developed physique and are active and brave, as bravery goes there. The privations described by Stanley in his march through the great central African forest are of periodical occurrence among non-agricultural and nomadic people. Of such is their daily history. When Stanley and the remnant of his band passed out of the forest into the open, however, and came in sight of the fields of maize, good cheer and plenty were assured.

Increase of Population.—So far, the existence of men has been precarious. That fact has been constantly kept in view and reiterated. The growth of population has pressed so closely upon the means of subsistence that hunger and want are common and ordinary conditions. Getting a living is fraught with so much toil and uncertainty, and so connected with privation and hardship, that only the strong and the robust can survive. The death rate is high and the period of life is short. Artificial means are employed to check the growth of population and reduce the numbers of the community. Among many peoples, as soon as age or disease renders a member of the community incompetent to take care of himself and help the others, it is considered, that as a matter of course, his sphere of activity is ended. Among the Esquimaux, a snow hut is constructed at a distance from the family habitation and there the sufferer is taken. A litttle food is placed beside him and the entrance to the hut is blocked up. There is one less mouth in the community to feed. The victim faces death stoically because to him it appears to come in the natural order of events. Lack of subsistence and the difficulty of procuring it are doubtless the original incentives for the common practice among savage and barbarous peoples of exposing the sick and aged to death. Cannibalism and infanticide may be attributed to poverty of food supply. They

have existed in all primitive societies. With the advent of the agricultural life and with it the cultivation of cereals and plants, savage practices become less frequent, and the condition of savagery is ameliorated. The capacity of a given territory, to support population, is indefinitely enlarged. The land required by the hunter to sustain himself and family is measured by square leagues; that of the herdsman by square miles; with the agriculturist it is measured by acres, and where intensive agriculture is practiced, as in some portions of India and China, it is measured by square rods.

CHAPTER II.

THE VILLAGE COMMUNITY.

Home Making.—The Scandanavian legend, with which the last chapter opened, indicated that the agricultural life introduces an economic activity higher than any which exists previously. It denotes a higher civilization, and the higher civilization drives out the lower civilization which precedes it. Pastoral life and a pastoral people disappear before the advance of the agricultural life. But the beginning of the agricultural life represents the beginning of a still more important economic movement. It ushers out the nomadic life and introduces the fixed community life. From the moment when the herdsmen and hunters begin to till the soil, they begin to settle down and enter upon the process of home making. They commence to have an abode. Economic activity becomes localized and fixed. Having once habituated themselves to a chosen spot, the associations connected with it give rise to pleasures in the minds of men which are lastingly felt and which develop into ties of exceeding strength. The result is a nobler mental activity and a tremendous effort to advance the material welfare. The house is no longer a temporary hut. It becomes a summer and winter residence. It gives its owner a sense of his own importance. "The effect of a framed or stone house is immense on the tranquility, power, and refinement of the builder." It conveys to him a sense of personal security and guarantees him the enjoyment of his private property, and security in the enjoyment of person and in the possession of property are the first requisites of growth into the higher economic stages out of the lower.

Economic Dependence in the Community Life.—It is no longer simply that community of living which prevails in the nomadic life. It is not only community of living but much more. It involves some mutual economic interdepend-

ence. The time has come when each family ceases to be economically sufficient unto itself. It ceases to be the economic unit. There is some dependence of each family of a community upon the other families. The family has now come to be the small household of closely related individuals. The members become dependent upon members of other families for the satisfaction of their economic wants. The community itself may be isolated from all other communities but the economic isolation of the families or domestic groups, begins to disappear. The village itself is the economic unit. Its economic condition is similar to that of the nomadic band, or to the enlarged household common to nomadic life. The agricultural life may not be solely responsible for the village community life, but when the nomadic life is found to be disappearing and the fixed community life succeeding it, accompanied by tillage as a source of subsistence, it is fair to say that in such cases the introduction of the art of cultivation is the primary and controlling cause for the assumption of the fixed abode. The purposes of mutual protection, however, are frequently present and operate to encourage fixed community life.

The Selection of Village Sites.—The hunter and the herdsman know where the richest virgin soil prevails. They know where vegetation is the rankest; where the pasture is always the greenest and where the herbivores prefer to roam because the fare is best. They observe topography in their wanderings and when the time arrives, in the course of nature, for the band to settle down and commence a rude cultivation of the soil, it is easy to select the most favorable and desirable spot. The first settlements, therefore, are upon the most favorable locations. The rich alluvial soil yields the best returns and requires the least manipulation in the process of cultivation. It is often said that the poorest land is first cultivated and that the mountain sides and tops offer the best inducements to the first cultivators, who have neither the tools or the strength to clear forests. This is only partially true. The mountain dwellers and the inhabitants of the barrens are usually the last to practice agriculture. The deltas of rivers, especially in the eastern hemisphere, have been the scenes of

agricultural beginnings. Even weak beginners in agriculture do not hesitate to attack a forest, if soil and location are favorable. The early Florida settlers found that they would make no mistake in locating upon the abandoned Indian fields. These fields are scattered throughout the entire southern portion of the state. They are covered with second growth timber which has sprung up since they were abandoned. They are sure to embrace the richest soil and to occupy the most advantageous locations, topographically, for agricultural pursuits. If there is any spot in a neighborhood likely to be free from frost, it is an old Indian field.

The Village Community.—Nearly the whole of Europe has at various periods been dotted by agricultural village communities, and all European people have passed through the village community stage of economies. It is one of the steps in the development of political, as well as of industrial society. In the natural course of events the village community life has superseded the nomadic life in all parts of the world. The nomadic band settles down and commences to till the soil. A village community is a group of families living in neighboring abodes and uniting their forces for mutual protection and subsistence. In the earlier periods of village organization the homes are frequently of a communal character, accommodating a number of families or domestic groups of related individuals. At the beginning of the village community life the land is owned and cultivated in common. The crops are harvested in common and placed in a common storehouse. Later on the fields which stretch away from the village are subdivided and each family is given its alloted parcel or holding. The allotments are changed or re-allotment takes place at stated intervals. After the allotment of holdings each family may have the result of its own cultivation, although frequently obliged to turn a specific portion into a common storehouse.

Village Communities of the East.—The last paragraph contains a brief outline of the average village community. The community life, however, has assumed various forms in different places, among different people. Among Monarchic tribes there is a tendency on the part of some of the villagers

to become serfs subject to the will of the chief or lord. As serfs they lose their original proprietory interest in the soil. It becomes the property of the lord and the serfs are attached to it. Among republican tribes there is a counter tendency on the part of the villagers to become freemen and to become owners in severalty of a portion of the surrounding land. Originally free communities are frequently the subject of conquest. The members are allowed to remain on the land by their conquerors but subject to the will of the latter. The allotment of the land in such cases is made by the conquerors instead of being regulated by the will of the community. This condition of things will be referred to in the next chapter.

Where the villagers are freemen occupying the surrounding lands in common, as among the Germanic tribes, it is the Mark system. Where, as in England, in Anglo-Saxon times, a large portion of the surrounding land is cultivated, not as the property of the cultivators but of the lord, it is the Manor system. By reason of a tendency for a people to grow out of the condition of serfdom, after a time the serfs come to recover a proprietary interest in their holdings of land and the manor gradually assumes the character of the later village community with a population of freemen. Many tribes in the Eastern hemisphere are in the village community stage of development. This fact is specially noticable in parts of Oceanica. In Russia the village community life is now at its perfection. The Russian Mir has all the elements of the universal type.

Village Communities of the West.—The Western Hemisphere furnishes good illustrations of all the economic states and conditions which have been so far discussed. All things considered, they are the best illustrations for our purpose. The Indian villages of Zuni or Acoma, as they exist to-day and will doubtless exist for many years to come, are admirable illustrations of the typical village community of the period of development to which they belong. There are the overgrown communal habitations. There are the flocks and herds, for the most part, owned in common, driven out to the common pastures in the morning and tended by herdsmen who have assumed the employment. Around the villages are the little

yards and corrals where the goats and sheep are penned at night. Upon the outskirts are many little gardens devoted to horticulture and vegetable growing. There are paths leading away to the horizon where are the common fields. The heads of families receive an allotment for purposes of cultivation, and they may dispose of their improvements, but the land itself is the property of the village. While the agricultural products may be the individual property of the cultivator, yet they are of common interest to all, and no family will want when there are provisions in the village.

These Indian villages have not the long, rambling street which characterized the village community of Europe. House architecture must conform to local circumstances and these relate largely to the question of security from marauders. The villager must everywhere protect himself from his nomadic neighbors who are prone to harass him and harry his stores of provisions. The village Indians of America have always been subject to the attacks of the more warlike and less provident nomadic Indians. The locations of the villages have therefore been selected with an eye to lines of defense, and architecture has been shaped to the same ends. Otherwise the economic activity of the villagers is not far different from that which existed in Europe.

Among the village Indians we find the simple crafts which the demands of village economics call into existence. There is the potter whose art it is to fashion, glaze and adorn the village pottery. There is the hand weaver, weaving from wool or the fiber of the maguey. There is the wheelwright who carries on his occupation rudely, in the open air. Within the houses are the stone hand-mills where the grain is pulverized by the women. It appears to be an enormous stride in advance when the agriculturist has developed these arts and industries. We must remember, however, that it took ages for the village Indians to develop the economic stage of the village. If they should progress according to the course of nature, the lapse of ages would be required for the development of the succeeding stage. The Indian village of Acoma is to-day almost precisely what it was when the first Spanish explorer saw it in 1540. Its

people have added to their stock of domestic animals the varieties brought by the new civilization, but otherwise three and a half centuries have not changed its main economic characteristics. The men go about with the same boomerangs sticking in their belts. They kill hares with a club to-day just as of yore. The women weave and wear the same clothing of maguey fibre. The stranger is feasted on venison, pumpkins and maize bread prepared in no different manner. Each village is as sufficiently self supporting and as economically isolated, as when Cabeza de Vaca visited the Pueblos in 1535. Their authentic history, irrespective of the evidences of antiquity preserved in folk lore, furnishes excellent proof of the slow development of the economic stages.

CHAPTER III.

THE LAND AND THE LABORER.

The Landed Property of Animals.—Some animals commonly assert exclusive rights to the possession of specific territory. The lion selects his hunting ground and defends it against intruders. "He puts up the sign 'no poaching,' and if the warning is not heeded a battle takes place." The territory claimed is, of course, ill-defined. It is not described by metes or bounds. Some of the bird family are a little more definite in their claims. There are fishing birds which, having chosen a good fishing ground, drive off all who intrude within a short flight of the perch. Pack-hunting animals frequently claim territory in common. The wandering dogs of Egypt unite in defending the favorite haunts of the band. The Pariah dogs of the East Indian cities join their forces and take up their residence in a certain quarter of the city. In case a stray cur comes into their territory they make common cause in driving him out. More intelligent assertions of proprietary rights in land seem to exist among the anthropoid apes.

The Landed Property of the Nomad.—The assertion of exclusive rights of occupancy and possession by nomadic tribes is of a higher nature than the instinctive assertions of animals. Nomadic tribes develop a vague notion of tribal possessions at an early economic stage. At first it means the exclusive right to roam and hunt within certain customary limits. Usage finally establishes a right to the spontaneous fruits of the territory and an exclusive right of pasturage. In the end the arable soil becomes the property of the tribe. The boundaries of the tribal territory depend at first on the extent to which the band roams. This in turn is affected by its numbers and the quantity of subsistence required. The tribal possessions are finally circumscribed by mountain chains, valleys, rivers and the edges of plains. Imaginary boundary lines are

not yet in vogue. Possession is retained only at the point of the spear and lines of demarcation are selected wholly with reference to their strategic advantages.

Land for its Own Sake.—In the last chapter there was an attempt to show how the advent of the agricultural life produces a demand for the arable soil. The introduction of tillage marks the beginning of property in land according to the modern meaning of property. Property in land gives rise to a fruitful theme of economic discussion. Reference was made to the development of landed property in the discussion of the agricultural stages, and it will be again referred to. At this time it is important to observe that up to the period when the cultivation of cereals and plants gives rise to a demand for the soil, for what it can produce by tillage rather than for its spontaneous fruits or its game, economic activity is almost wholly determined by natural forces. But now men have learned to train natural forces into ways that contribute to their support. The spontaneous productions of nature become secondary sources of subsistence when men turn hunters. After a while game becomes secondary to the milk and meat subsistence of the pastoral life. Finally the milk and meat subsistence become subordinate to the farinaceous subsistence. With each step, necessity for the application of systematized labor becomes more imperative. The berry picker and nut gatherer are obliged to expend only such effort as may be required to harvest the spontaneous fruits of the soil. The hunter and fisher finds his labors increased. He must put forth more muscular effort and use more craft. Still greater exertion is required of the herdsman. The flocks and cattle require stated attention. Labor assumes the character of regular daily toil.

Systematized Labor.—Coming down to the agricultural life it is found that the man who relies wholly or partially upon the cultivation of plants for subsistence, is bound to engage in systematic labor. Mankind has already discovered that in order to satisfy the necessities of existence, a certain amount of work is required. It is a principle applicable to all living things. "The seed has to toil to raise its covering, the hard-

ened crust of the earth, and then breathe the air and feel the light. While clinging to its bed the oyster opens and closes in order to draw from the surrounding water the first elements of nourishment. The spider spins its web, the fox and wolf labor while they hunt their prey. Man is not exempt from this universal and voluntary law." The labor of man, however, is a conscious and voluntary act. That of animals is unconscious and instinctive.

The agriculturist is obliged to do more than those who have preceded him in the order of economic development, because he must reclaim the wild land. In most cases it is necessary for him to clear away the forests. He must plant his seeds with the season, and must exercise intelligent patience while he is working and waiting for the harvest. He must hoe and irrigate and in many ways seek to control nature's subtle forces in order to secure their co-operation and procure a crop.

A Division of Employments, is one of the important results of the agricultural life. The daily duties have become diverse and complicated, and require skill and training. Some of the agricultural operations require man's undivided attention. There are so many "irons in the fire," that one mind cannot care for them all. One man, therefore, looks after the crops, and another tends the herds. The distinctions of occupation, slight at first, gradually become pronounced. The advantage of a division of employments relates first of all to the skill in one direction which is acquired by the man who devotes himself to one kind of labor. The herder acquires some technical knowledge of the structural organization of the various domestic animals and is better prepared to treat their diseases and give them the special care which emergencies may require. The farmer learns the peculiarities of different seeds and acquires special knowledge of the conditions of germination.

The Service of Others.—The village life and pursuit of agriculture give rise to another important change. Hitherto all men have been under equal obligations to labor. Each man has performed his share in the common industries. The material condition of each of the members of the family and of

the tribe, was precisely the same. The time comes when some members of the community have more work to be done than they can do themselves. Thay require the service of others as one of their economic wants. On the other hand, there are a few members whose share of property is so small that the utilization of it, by their personal labor, will not suffice to support them. They must enter into the service of the more fortunate members. Possession or non-possession of land appears to give rise to the primary distinctions of class. There is a limit to the quantity of land which may be the subject of use and ownership and unless it is divided into smaller holdings as population grows, some must go without. There are many theories in explanation of the fact that one part of mankind gets the land and accumulates more upon it than can be personally managed, and another part is landless, fails to accumulate and is obliged to serve the fortunate part for wages. As one of the facts of economics, further reference will be made to it in the chapter on the Rise of Economic Classes.

The Evolution of Landed Property.—Something was said in a preceding chapter about the growth of landed property incident to the enumeration of the various agricultural stages. The subject may now be discussed upon its merits, and with reference to its own economic character. An excellent review of the historical evolution of landed property has been prepared by Gide. It appears in his *Principles of Political Economy*, and will be closely followed.

Five Stages of Evolution.—There are five stages or phases of development of private property in land. Each has appeared in sufficiently numerous instances to warrant mention, although it does not follow that the succession of stages has invariably occurred. It sometimes happens that some one phase has never appeared in the land economy of a country.

1. *Communal or Collective Ownership.*—In the first stage the land belongs to the tribe or community. At the beginning of the stage it is cultivated in common, and every man expends an equal amount of labor in the common cultivation, and the products are owned and used in common.

2. *Periodical Allotment of Use and Possession.*—In the sec-

ond stage the population has ceased to be nomadic, and has assumed the character of a fixed community. The soil having been made arable and brought under cultivation, is no longer abandoned to suit a change of location, but its cultivation is continued according to customary and more productive methods. The arable soil belonging to the community is subdivided, and the temporary possession of a portion is given to each head of a family. The land itself is the property of the community at large, and the various subdivisions are changed by allotment at stated periods. The temporary possession is perhaps at first for a single season—the time embraced in the ordinary cycle of agricultural operations. The process of cultivation is regulated also by custom which fixes the character of the crop to which each holder shall apply his allotment. The plan of periodical division among the heads of families is still practiced in the Mir, the village community of Russia. The distribution has there become biennial. The portion of the common territory upon which the houses are built, together with the gardens connected with them, is the hereditary property of the village and not subject to division. The meadow land is parceled out along with the crop land. The pasture land remains the common property of the community, each member being entitled to a certain quantity of pasturage.

3. *Permanent Possession without Right of Disposal.*—The realloting of the land becomes less frequent. The possession of the householder lasts for a longer period. The more skillful cultivators of the community bring their allotments into a higher state of cultivation than the others and endeavor to postpone the re-allotment as long as possible. Finally the periodical division falls into disuse, and the householder and his family as a unit, become entitled to the permanent use and possession of their last allotment. The title to the soil, however, for a long time afterward is vested in the community at large, and the right of disposal does not pass with the permanent right of possession. This system exists among the family communities of eastern Europe, especially in Bulgaria and Croatia.

4. *The Tenure Holding.*—The fourth stage has been ascribed

to accident, rather than to evolution. It is an accident, however, which has occurred so uniformly among all human societies, as to become a phase of the evolution of landed property. It relates to the conquest of one people by another. The conquerers appropriate the land of the conquered territory and assert the legal ownership of the soil. The conquered are left in possession by what is called tenure. The tenure is more or less akin to actual ownership, but is limited by such concessions as the conquerors may make to the cultivators, and is burdened by the servitudes which the conquerors impose. The condition of the original inhabitants is that of serfdom, which is described in a succeeding part of this chapter.

5. *The Freehold.*—The fifth stage witnesses the full development of private ownership. It becomes a freehold, alienable by the owner at will. In this stage the old feudal system of tenure disappears, and with it also communal or collective ownership. Individualism completely supersedes communism. It comes to pass by the end of the city stage of economics, although the transfer of land is hampered by many restrictions which are cleared away in the succeeding stages.

A Sixth Stage is claimed to be necessary in order to complete the process of evolution. The required condition of things relates more to the transfer of land from hand to hand, from one owner to another, than to its ownership. In this stage landed property will be disposed of as easily as any article of personal property. It is claimed that the Torrens land system adopted in the Australian colonies, is a realization of this final step. By the Torrens system "the owner of real estate is able as it were to docket his land in the shape of a sheet of paper, and to transfer it from one person to another with the same ease as if it were a banknote, or at least a bill of exchange."

Communal Versus Individual Ownership.—The discussion of communism belongs to a later part of the work. While the subject of the development of property is so fresh in mind however, it is possible to picture in a few words the basis of the doctrine of communism, or collectivism as its teachers now prefer to call it. The word property has become so intimately associated with the idea of land that the term "development

of property" usually stands for the development of private ownership of land. The communistic theory denies that any individual has the right to appropriate a part of the domain of nature which was created for all men alike. Therefore the land should be held and used for the common benefit of all, and the primitive ownership by the community is the only just organization. The subject narrows down to these questions: Is the course of landed property, resulting in its becoming the free and exclusive property of individuals, a just and natural course, or has it been due to coercive and iniquitous human institutions, perverting the course of nature? Is it just that individuals should seize upon what was originally common and make it the subject of private ownership? Is private ownership right? Should the primitive collective ownership of the community at large be reinstituted by society and how?

Slavery.—It is necessary to go back a little now, for in the order of development, slavery precedes the hiring of service. It usually begins with the fixed community life. Nomads cannot conveniently carry slaves about with them, and neither the hunting or the pastoral tribe has much for a slave to do. To the agriculturist, however, with whom labor assumes such importance, an able-bodied laborer is an object of interest. After having settled down into a fixed community life men can look after slaves and find daily use for them. At first, like other objects which are the subject of ownership in early times, the slaves are the common property of the community. They labor for the community at large. The villager with his common interest in the lands, provisions, and slaves becomes a capitalist, and the slave the laborer. There is no collision between capital and labor, however, because the slave is both the capital as well as the laborer. The agricultural community life, then, is responsible for another great economic change. Prior to it no man is master and no man is servant. Now comes the slave serving a master and after him the servant in the hire of an employer.

Serfdom is said to originate in two ways. First, by the conquest and subjugation of the originally free inhabitants of a country, and secondly, by the natural growth of mon-

archical institutions. Arising in the first way it is an amelioration of the lot of slavery. When a whole country is conquered the conquerors cannot well convert the entire population into personal slaves. The country is parceled out among the victors and as part of the spoils the original dwellers go with the soil. Thenceforth they belong to it, and while not considered the personal property of the lord or owner of the soil, yet they are under his authority and cannot leave his domain without his consent.

Originating in the second way, serfdom is a natural growth within the tribe. It is assumed that there is a time when civil equality prevails. The political affairs of the tribe are managed by elective chiefs. The elective chiefs gradually become hereditary and the chieftainship arises not by election by the members of the tribe but by descent or succession. The hereditary chiefs assert unto themselves greater and greater authority over the hitherto common lands until finally it is parcelled out wholly according to their wills. The allotments are held at their pleasure and the holding is a tenure. Whatever doubt may exist as to the true origin of serfdom, there is none as to the actual condition of the serf. He is bound to the soil and goes with it if it changes hands, like any fixture. The idea of permanence and attachment to the soil is the controlling feature of serfdom. The time comes, however, when the lords begin to sell liberty to the serfs. It involves, simply, permission to depart from the community and from the domain of the lord. To go and come at will. At first, the price rests wholly in the caprice of the lord. It finally becomes fixed by long usage and a customary price is then set upon the serf's freedom. It is paid by the performance of labor or in cattle, sheep or agricultural products. Those who do not gain freedom by purchase from, or gift of, the lord acquire it in the course of the natural development out of the condition of serfdom.

CHAPTER IV.

VILLAGE HOUSEKEEPING.

Derivative Meaning of "Economics."—The word economics is derived from two Greek words, *oikos*, meaning a household, domestic affairs or the domestic establishment, and *nomos*, meaning law or regulation. Agreeably to its derivation, therefore, economics primarily refers to the government or regulation of a household, and the art of housekeeping or regulating domestic affairs. It would not be inappropriate therefore to speak of the economics of the family, as family housekeeping. The economics of the village would be village housekeeping. Under the head of village housekeeping would come discussion of the regulation of the internal or domestic affairs of the village community.

Village Employments.—Agriculture was at first carried on jointly with the pursuits which had been followed before it, and the first agriculturists were hunters, fishers and herdsmen, as well as tillers of the soil. Each member of the family was conversant with all the rude arts of the time There was little distinction of sex arising from occupation. Men took longer tramps than the women when game was sought for, but the women could lend a hand at hunting, and they tended the flocks and looked after the little horticultural enterprises. The introduction of field agriculture gave rise to employments suitable only for men. House life and its incidents becomes more appropriate to women, and out-door life to men. The men come to follow the bent of their minds. They begin to devote themselves to different kinds of labor. Some prove to be best fitted for herdsmen, while others are natural agriculturists, and devote themselves to field labor. These occupations gradually become distinct. The great mass of the members of all village communities devote themselves to one of them. Fishing and hunting become pastimes with the majority.

There are a few, however, in whom the nomadic spirit is still paramount. They decline to engage in stated daily labor. They are the ne'er-do-wells of the community.

Village Artisans.—In the first economic stage each family builds its house and makes the utensils and clothing which it requires. When men come to engage in agricultural pursuits upon a large scale the necessity for a few primitive artisans is felt. Some rude tools and appliances are required. The agriculturist and herdsman cannot find time to learn to use them, nor can each member of the community afford to own them. The artisan class commences, perhaps, with the smith and the carpenter. The smith is a universal ironworker. He makes and repairs plows, carts and cooking utensils. The carpenter is not only house-builder, but also boat-builder, cart-maker and furniture-maker. He is the universal wood-worker. They possess the only knowledge of these arts. The other men lose it or fail to acquire it. In the later stages of village community development, each village contains representatives of all the crafts necessary for the daily life of the community and to provide for its wants.

The Division of the Profits.—It has been said that there is yet no contest between capital and labor. The body of laborers—those who serve others for fixed wages—is so small, as compared with the rest of the population, that its voice is not heard. The early villagers, therefore, are all capitalists as well as laborers. They all labor in the common undertakings and have a proprietary interest in the results of labor. Each gets a share of the results of the common toil. The herdsman receives so much meat and milk from the herds which he tends, while the surplus goes to the agriculturist and the other members of the community. They in turn pass over to the herdsman some of the agricultural products. In the early stages of village community life, the smith and the carpenter, and later on the wright and the miller, are elected or appointed by the community, and are communal officers occupying a relatively high rank. For their services to the community they receive a portion of meat and grain. The share of each member of the community, according to his rank and

needs, is usually fixed by immemorial custom and usage. In the latter part of the village stage, the landless class has grown to such proportions as to become a hostile force in the community—hostile to the citizens or landed class. The story of the contest between the two classes is told in the chapters which follow, under the head of "The Economics of the City."

Pioneer Peoples.—The industrial life of the village community is common among all pioneer peoples. In a new country every man must, for a time, know something about all the arts and crafts. Like Saint Dunstan, who was a prelate, politician, "an excellent blacksmith, bell founder and designer of ladies' robes," they must be able to turn the hand to meet all the emergencies which may arise. So it is that they grow the flax in the field, and after they have put it through the brake, superintend each manipulation until it is woven into clothing.

Truck Economy.—The exchange of commodities has now become more comprehensive than the barter of family economics. In the family stage of industrial society there is no pre-concerted movement toward the production of surplus commodities for the purposes of barter. Men now labor to secure a surplus of one or two of the articles in common demand, with the intention of exchanging it for other articles which they require. The slight division of employments which arises in the village community life, creates a necessity for the interchange of commodities. The craftsmen and all those members of the village not directly engaged in producing subsistence of food, are paid in truck. They exchange their labor for wheat and milk. At first there is no village storekeeper or shopkeeper. When he does come to exist he is a truck dealer. He pays for commodities with commodities.

The Control of Village Trade.—Just as the tribe and the enlarged household, in the family stage of economics, controlled trade, and made it a family enterprise, so village communities make it a village enterprise. In the early stages of village formation, the communal life is almost as complete and as perfectly organized as with the isolated family. The community is interested in all that is produced and the

products are owned in common. The village, therefore, is naturally interested in the exchange of the village property, and, very properly, the community controls the exchange. Another reason for village control is the existing lack of order and respect for private possession of property. The combined strength of the village is needed to enforce fair exchanges. In the later stages of village formation, the idea of private ownership has developed. Individuals own the fruits of their labor, and greater security is afforded the owner. The village still controls trade, however, by and among its members and within its precincts, for another reason. That reason is village aggrandizement. The activity of the members of the village is directed toward the village welfare. Every member makes the common interest his interest. At first the unwritten, and later the written laws of the village demand that no individual shall trade except for the common benefit. The manner of making exchanges is so regulated that the supposed common benefit will be secured. Members of neighboring villages are forbidden to trade. In so far as the village has a centralized authority it is directed toward the control of trade for the benefit of the immediate community composing its membership. In the succeeding chapter, entitled "The Trader," it will be shown how this village control of trade ripens into a far-reaching municipal control, and trade privileges are either confined solely to citizens or burgesses possessing the franchise of the city, or else trade regulations are such as to give them a monopoly of trade.

The Character of Village Trade.—This economic stage affords no indications of systematic trade. It is not like the commerce of modern times. At first it is simply an exchange of commodity for commodity among the villagers, necessitated by their different employments, and also by the increase of their wants. Afterwards, when one village has a surplus of some article, and a neighboring village experiences a dearth of that article, but has a surplus of another, there is an exchange of surpluses. It is inter-village trade. Geographical location may secure to one village a stated surplus of one commodity and keep it in want of others. The inhabitants of a fishing

village, for instance, will have made economic progress corresponding to that of the neighboring agricultural villages. They will have better fishing appliances than their ancestors of the family stage of economics. They will have more and higher wants—wants which the catch of fish will not satisfy. They will catch more fish than are required for their own support, and will need to exchange the surplus to satisfy their other wants.

The Increase of Capital.—It has been observed that among nomadic peoples there is little effort to accumulate capital. Nomadic life forbids the acquisition of a store of goods for future consumption or use, and capital will consist of the weapons of the chase, a few simple cooking utensils and the flocks. There is no storing for future consumption. With the advent of the fixed community life, however, comes the tendency to the production of commodities for future employment or consumption. The instinctive propensity to store, inherent in animals, develops in men and ripens into preconceived design. The necessities of the agricultural community life demand more capital. There must be agricultural implements of which the nomad had no need. The villager confines the range of his operations to a limited territory. He does not break camp when the country does not provide for its inhabitants, as the nomad does. Therefore, he must necessarily accumulate for certain times and seasons when agricultural operations are at a standstill and the earth yields no increase. The population of the village would be too great for the supporting capacity of its territory, if herds and flocks, combined with game, were the sole reliance. Moreover, the agriculturist of the fixed community has entered a stage of civilization higher than that of the herdsman or hunter. His wants have increased accordingly, and an increase of capital is necessary to satisfy the superior and increased number of wants pertaining to the higher civilization. Men can no longer procure each day the food of that day. The fact that nature works in her moods, and men living in the agricultural life on the produce of the soil, must abide by the seasons, must wait for the seeds to germinate and fruit, presupposes some accumulations

of goods for future consumption. The fact that there is a simple division of employments, also presupposes some accumulation of goods.

Village Manufactures.—From the fact that we find in the village community representatives of the ruder crafts, we would naturally expect to discover some signs of manufacturing industry. The village craftsman, however; manufactures to order only. He is really more of a tinker by trade. He makes up the raw goods which are brought to him. Plows are not made to be kept in stock until a customer calls. Articles requiring much skill or expenditure of time in the manufacture are made from time to time as they are required for immediate use. Manufacturing to a noticeable extent is not possible until a considerable body of men can devote themselves to something beside agriculture, and we have seen that in the village community life, men are given over to agriculture and the operations incident to it.

CHAPTER V.

THE FIRST FORMS OF MONEY

Disadvantages of Truck Economy.—Mr. Jevons begins his book *Money and the Mechanism of Exchange*, by telling how the prima donna Mdlle. Zélie gave a concert in the Society Islands. Her remuneration was to be one-third of the proceeds. When the receipts of the box office were counted up, the singer found that her part consisted of a lot of poultry, fruit and monkeys. She could not take the property with her on her travels, and had no use for it. In order to realize any results from her concert, she was obliged to go about and hunt up people with whom she could exchange the truck for other things which she could use or transport. Cameron the African explorer wanted to buy a boat in Africa and he tells of the difficulties he experienced in this way: "Syde's agent wished to be paid in ivory of which I had none; but I found that Mohammed Ibu Salib had ivory and wanted cloth. Still, as I had no cloth, this did not assist me greatly until I heard that Mohammed Ibu Gharib had cloth and wanted wire. This I fortunately possessed. So I gave Ibu Gharib the requisite amount in wire; upon which he handed over cloth to Ibu Salib, who in his turn gave Syde Ibu Halib's agent the wished-for ivory. Then he allowed me to have the boat." These stories illustrate the disadvantages of truck economy. It has been shown that the division of employments which arises in the agricultural community life necessitates some exchange of commodities. When the time comes that men devote themselves to one kind of labor, it necessarily happens that they must use the products of the labor of other men, engaged in different kinds of labor. In order to get it they must exchange the products of their own labor. There must be some distribution among the different members of the community, of the various community products. At first this distribution is

effected by the actual exchange of commodity for commodity. The smith exchanges a plow for sheep or some wheat. The carpenter exchanges the result of his work for clothing and provisions. The herdsman must exchange with the agriculturist and the craftsman. Observe the disadvantages of the system. A number of men might wish to exchange sheep for plows and the smith must keep his plows or take more sheep than he needs. If he takes the sheep he must find someone who wants sheep and has a surplus of flour and potatoes. So it goes through the community. Every man having a surplus of a commodity must find another member of the community who wants that surplus and who also has a surplus of a commodity of the desired kind. A dozen exchanges may be required before a man gets what he wants.

Increasing Difficulties with Increasing Wants.—In the early stages of industrial society, when wants are few and simple—when each family is sufficient unto itself and each member of the family joins in contributing to the common subsistence, it can be conceived how the difficulties connected with the interchange of commodities, so far as interchange is necessary, may be overcome. As society progresses and wants increase, and assume a higher character, it becomes increasingly difficult for the members of the community to make satisfactory exchanges.

Overcoming the Difficulties.—The first attempts at overcoming or circumventing the difficulties are rude, yet they are fully abreast of the arts of life, of the period. In very early times men have practiced the plan of selecting some one commodity as a measure of value and the medium of exchange. The commodity selected, to be employed as money, is that which is most desired by the members of the community. It is that which a majority of the members want. Its adaptation for the purposes of a medium of exchange, other things being equal, depends upon its divisability and its value as compared with its bulk. Auk feathers are universally wanted on the Labrador coasts, but they are not as good a medium of exchange as dried fish, because of their bulky nature and the difficulty of transporting and transferring them.

Fur Money.—One of the earliest forms of money consisted of the skins of fur bearing animals. Fur would be the commodity of which the hunter would have a surplus, and the hunter is likely to be the first member of industrial society having need of a currency. Fur money has been in common use in some parts of Russia and Siberia for many centuries, and in the latter country, as well as in the far north of North America, it is still a medium of exchange. At the posts of the Hudson Bay Company, the beaver skin is the unit of value. For small change martin skins are used, three of them being equal to one beaver skin. If an Indian trapper desires a rifle he must turn over fifteen beaver skins, more or less, according to the state of prices. If he wants a pair of boots, the price will be measured in martin skins. The Russian word "kung" means both money and fur.

Cattle Money.—With the advent of pastoral life and among a pastoral people cattle became a convenient commodity for use in exchange. They are then more universally distributed and more universally desired than any other commodity, and they naturally became current commodities. The domestic animals continued for centuries to be the unit of value. Homeric prices are ordinarily quoted in oxen. The Latin word "pecunia," meaning cattle, by the law of the association, came to mean money, just as the Russian word for skin came to mean money. The commodity derives a new meaning from the use which is made of it.

Grain Money.—When men enter upon the agricultural life, the cereals begin to be more universally distributed and desired than cattle. Cattle raising then becomes a secondary occupation and grain raising a primary occupation. Grain either supersedes the use of cattle as money or is used contemporaneously. There are many qualities about grain which fit it to be the currency of a higher civilization. Every member of the community without exception wants it and can use it. It is of greater durability than any form of money which precedes it. In modern times it is usually classed among perishable commodities, yet, as things went in the village community life, it was capable of longer preservation than any food com-

modity in common use. Moreover its divisibility is an important quality. For the first time men were now provided with a full supply of small change. Grain could be divided into pecks, half-pecks or quarts. Among the village Indians of New Mexico it is still a common medium of exchange. In medieval England, its use for the purpose of payment or exchange was preserved even after coinage came into vogue. The royal tithes were sometimes paid in wheat. Enough to make flour for one hundred men counted as a shilling.

Colonial Indian Money.—The Indian money of colonial New England furnishes a good illustration of a primitive medium of exchange. It was the wampum of the Narragansetts and Montauks. It has been rated a very important factor in New England civilization because of its use in facilitating the exchange of the furs of the interior Indians for the commodities of the whites. It brought the furs from the North and West to the New England colonies, and they in turn exchanged the furs for molasses and sugar, and the stock in trade of the Dutch and English trader. It represented the rude beginning of coinage. Deftness, skill, and application were required to make it from the inner whorl of the peri-winkle shell. It required labor to grind and polish the beads upon stones and pierce them with the little holes whereby they could be braided and strung. Wampun gave value to the labor of the Narragansetts, and it bought them tools and provisions of the settlers.

Other Illustrations.—According to Homer, "the long-haired Greeks bought wine, some for brass, some for shining iron, others for hides, some for the oxen themselves, and some for slaves." This illustrates the use of the metals, in primitive forms along with other commodities, as money. Salt bars are the currency of Dahomey. Glass beads and cotton cloth are current money in Central Africa.

CHAPTER VI.

A REVIEW OF THE ECONOMIC PROGRESS.

Mastery Over Nature.—You have observed that subjection to nature characterized the economics of the family. At first men were wholly dependent upon the bounty of nature, living on fruits, nuts, and bulbs. Afterward they acquired skill and unity sufficient to kill wild animals. That meant a considerable progress; next they domesticated the wild animals. That indicated a still greater victory over nature's forces. Now they have come to regulate the course of nature by the cultivation of plants for food.

The Progress Illustrated.—The Todas, one of the Hill Tribes of India, still live in a strictly pastoral state. Their country is rich in virgin soil, full of fertile valleys and plains, but their subsistence is almost solely upon buffalo meat, and milk. A recent traveler among them describes their condition as most filthy and wretched in the extreme. Some of the neighboring tribes, which have passed out of the pastoral state, and are cultivating soil of the same character as that of the Toda territory, are prosperous and wealthy. The economic progress of the latter is the story of man's transition from the "savage's subjection to nature, to the citizen's mastery of her forces."

The Increasing Sources of Subsistence.—Just as the seed of the cereals multiplies a hundred fold when it is given a chance, so, without exaggeration, we may say that men have increased their material welfare a hundred fold when they have learned to give it that chance. Ethnologists find it worthy of remark that people living in the hunter or pastoral state have no stated meals or meal times. When they become partially agricultural, they have one prepared meal a day, as was the case with the Iroquois. When they indefinitely increase their sources of food supply by the systematic cultivation of the

cereals, they have at least a breakfast and a dinner, like the village Indians of the Mexicos, and they are in want only at rare periods. The economic condition of the isolated family was ordinarily that which we call poverty-stricken. In the village there was thrift, forehandedness and comfort, not comfort according to modern standards but according to the standard of the preceding economic stage.

The Use of Tools.—The plow drawn by an ox is a great labor-saving machine as compared with the forked stick. Men could not build the houses of solid foundations and substantial structure, which they erect in the village stage of economics, without the use of various tools and appliances. Following the return of the survivors of the Jeannette, Congress appropriated a considerable sum of money for the purchase of presents for the natives of the Lena Delta, who had rendered aid and succor to the members of the expedition. The expenditure of the money, involving the selection and purchase of the articles to be distributed, was entrusted to an arctic traveler who knew the native wants. He bought quantities of sail needles, knives with wrought iron blades which would not snap, hatchets, ice picks with long blades for the thick ice, carpenters' tools, thimbles, thread, buttons, drinking cups and plates of granite ware, and copper kettles, and white horse hair for fish lines and nets. The entire assortment was consigned to the far north and distributed among the natives of the coast. They discarded their blunt bone needles and knives, their stone kettles and thong fish nets and entered upon a new career. It is announced that they have developed an economic condition infinitely superior to the old. They have a more regular and stated supply of food. They live in better and warmer houses, and are more comfortably dressed. In a few years they are likely to advance almost an entire ethnic period.

The Exchange of Commodities involves another important economic step in advance. Instead of trying to produce everything themselves—each man for himself—the members of the village have learned to satisfy some of their wants by the exchange of commodities. It involves a slight division of employments—a condition of things in which some of the villagers

devote themselves to one kind of labor. It involves some economic dependence. The farmer depends, for a part of his wants upon the labors of the carpenter, of the smith and the miller. The smith depends upon the farmer, the herdsman and the other workers of the village. Each must do the part he has assumed or mischief results. Industrial society—the state of living in which each person depends, sometimes very remotely, upon the labor of every other person—is taking shape.

The Distribution of Commodities.—This is hardly appreciable yet. If one village happens to have a dearth of a commodity which is in demand, and a neighboring village has a surplus, the surplus is likely to be taken in a raw state to where it is wanted, providing the distance is not great. Perhaps there are a few men who make it their occupation to transfer a surplus from the place where it is produced to the place where it is wanted. They add to the general economic dependence prevailing in the village. They must be supported while attending to their business.

The Growth of Property.—Not the least of the features indicating economic progress is the growth of property. The right of private ownership is first extended to tools, weapons and domestic utensils. Finally all articles of a personal nature cease to be owned in common and proprietary interest centres in one person. At the end of the village stage there is private property in land. It commences with the ownership of improvements and assisted by the associations arising from the long possession of a certain parcel it comes to pass, that the holder and user is considered to have a permanent right of possession which ripens into a proprietary interest in the soil itself. Of course, the possession of property is still frequently disputed. There is more respect for private property than when its possession depended upon the exercise of brute strength, but lawlessness and disorder is a prevailing feature.

Village Isolation.—Notwithstanding this economic progress, the village community is characterized by economic isolation. It is an isolated economic unit sufficient unto itself, just as before it, each family was sufficient unto itself. It sup-

plies its wants by the labor of its members and within its borders. The Pueblos have no commercial intercourse. An Anglo-Saxon village was independent, so far as its economic life was concerned, of every other village.

PART III.

ECONOMICS OF THE CITY.

CHAPTER I.

THE TRADER.

The Rise of Cities is the next epoch marking event in economic progress. The out-line study of the village and its system of economy has been concluded, although frequent references must be made to previous parts of the work for the purpose of comparison and illustration. There is one characteristic of village economics which should be clearly borne in mind, when the outline study of the succeeding economic stage and of a higher form of economy is commenced. It is the economic isolation of the village. The first economic unit was the family. The family merges into the higher economic organization of the village, and the village becomes the unit. The village is self-sufficient. The villagers have no economic dependence without. The community satisfies all its wants by the labor of its members. The productions of the village are rarely exchanged or distributed beyond the village population. Now, however, the village economy differentiates. The villagers begin to rely upon adjoining or foreign villages for part of their wants. In the course of growth their wants have increased beyond the capacity of the village to provide. This increase of wants first relates to some articles of necessity which the natural productions of the community cannot provide. Next, it relates to articles of luxury which are not found in the community and cannot be produced there, but which must usually come from foreign lands. In the third

place it relates to a dearth of home productions, necessitating the use of the surplus of adjoining communities. In the beginning, all of the articles intended to supply these increased wants of the village are brought into it in a raw state. The surplus productions of the village which go to pay for the articles brought into it, are taken away in a raw state. Later on, when the economy of the city has assumed form, stated manufacturing commences, and manufactured articles are handled.

Town and City.—In olden times a town was any enclosed collection of dwellings. The common use of the quick-set hedge or *tun*, as the enclosing medium, gave a name to the enclosure and it came to be called a town. As wars and domestic troubles increased, the timber palisade supplemented the hedge and the town finally became a fortified place. In England, the terms town and city are now nearly synonymous. Town is the more common and the more general term, because "city" was formerly applied only to those towns which had been the sees of bishops. In the United States the city is an incorporated municipality. In many states a town must have a population of over 10,000 in order to become incorporated as a city. Distinctions of size, rank and corporate privileges have therefore come to be associated with the terms town and city. The town may be incorporated, but its population is small and as a body corporate it possesses less priveleges than the city. In economics, the two terms may frequently be used synonymously. It is better, however, to preserve the idea of rank and to use the word town as a collection of houses and people, larger than the village, having a market—as the market town for a number of neighboring villages. The city is then an enlarged town, superior in size and in the volume of its trade and industry. It is the entrepot of a large territory, embracing not only many villages, but many market towns.

Economic Activity Concentrating.—The trade which results in the attempt to satisfy the increasing wants of the increasing population of the villages, produces concentration of economic activity among them. Just as the economic activity of the family becomes crystalized in and concentrated in the vil-

lage community, so that of the villages, concentrates and crystalizes about some central village. The village becomes the market town of a large number of villages. Later on it is the trading town of the country. In a succeeding paragraph we shall mention some of the conditions determining the villages which are to become towns and those which are to remain villages. It is a process of natural selection.

The Trader Builds the Town.—While this chapter is entitled "The Trader," much of the discussion is devoted to the rise of cities, and that title might not improperly be given to the chapter. The title employed is preferable, however, because the origin of cities, from an economic standpoint, is almost wholly ascribed to trade and commerce and their influences. It is the trader and the prosecution of his occupation which makes the city; and therefore the trader is the ultimate economic factor to be studied. For convenience of study, however, the rise of cities as one of the facts of economic history, will be first discussed. The relation of trade and the trader to the origin of cities may then be examined. Trade is the cause, the city is the effect.

Maritime Cities.—In studying the rise of cities some slight distinction will need to be made between maritime and inland cities. The maritime city is the first in order of formation. Repetition may here be made of the statement in a previous paragraph, entitled, "The Fisher First." It was stated that the seas and rivers are the first avenues for the progress of civilization and industry. Along the seacoasts, therefore, will naturally be found the earliest signs of economic development out of the village state. The first requisite for the formation of a maritime city, is a safe and convenient harbor, with facilities for the encouragement of navigation. These are the conditions determining the location. The Mediterranean separated continents of diffuse and varied productions. It was an inland sea, with shores indented by good harbors. Those shores have been the scene of the highest and best development of city economics. The Mediterranean was the great highway between the east and the west, and the location of the Mediterranean cities guaranteed the highest commercial advantages.

They became the warehouses for the rare and costly products of the more advanced civilization of the east. Through their instrumentality those eastern products were exchanged for the ruder products of the west. In discussing city economics, the mind naturally turns to a contemplation of the greatness of such cities as Venice and Genoa, and before them, of Athens and Rome. The greatness of the medieval maritime cities was more purely commercial than that of the highest type of inland cities of the same period. Recent investigation has traced back the history of London to a time when it was little more than an agricultural village community. It became a great city, while the neighboring villages remain villages still, simply because of its location with reference to commerce. London may be called the beginning of city economics in England, at least as compared with all other maritime cities.

Inland Cities.—The formation of inland cities rests upon a slightly different basis. The maritime city originated in the concentration of maritime trade, which was frequently international trade, or more properly, trade across the seas. It was a trade between different peoples of the diverse products of different countries. The inland town arises from the concentration of the economic activity of inland villages. The first manifestation is the exchange of the surplus products of neighboring villages. Afterward comes the exchange of those products for foreign products in connection with the nearest maritime city. The natural and geographical conditions which determine the location of the inland city are as fully pronounced as those which determine the location of the maritime city.

Good Roads.—The modern advocates of good roads would find much assistance for their cause in the discussion of the relation which the development of early communities bears to the passibility of highways. The location of the site of an inland town involves the question of accessibility as fully as the location of the site of the maritime town. Throughout all medieval Europe the location of the towns which then sprang up was determined by the condition of the thoroughfares. There were few good roads and the means of transportation were rude

and inefficient. It was physicially impossible for a town to rise in a location not accessible by the best of the thoroughfares of the time. Where the main arteries of travel crossed, therefore, other things being equal, there was a converging of good roads and the making of a market town.

The Presence of Law and Order, and the prevalence of lawful authority would have much to do with locating a town. At the beginning of city economics, it is well to bear in mind, there is no centralized authority. There is no national government which looks after the preservation of order over a large territory. Disorder and violence is as prevalent as peace and security. The various towns are looking after their individual interests, trying to increase their respective welfare, and there is no widespread ruling authority. Trade goes where it is protected, and as a flourishing trade is mainly responsible for the formation of the town, that town which preserves the best order, in which the trader's wares are most secure in his possession, and he is most free from robbery and violence, will be most likely to grow. In medieval Europe the ruling authorities of the monasteries were the first to exercise civil authority and introduce tranquility. The monastery itself furnished a refuge from organized bands of robbers, and beneath its walls frequently grew up the early flourishing trading towns. The monks not only instilled peace and tranquility, curbing the rude elements of the time, but they taught the arts of industry and thus the monastery frequently became the nucleus of a town.

City Economics in North America.—Up to this point it has been easy to find excellent illustrations of the development of the various economic stages in the Western Hemisphere. We shall look in vain, however, for the existence of a municipal economy. There are many great cities, of course, but they are parts of a larger whole. They are nationalized and belong to the present stage of economics. Following the publication of the discoveries of the Spanish conquerors in Mexico, and down to a comparatively recent date, the Pueblo of Mexico was spoken of as a city. It was described as existing in an advanced economic state with pronounced municipal institutions. If

the Western Hemisphere developed municipal economics, Mexico was certainly the only illustration. Better and more recent investigation, however, discloses the fact that the far-famed magnificence of the city was an exaggeration. The palace of the Montezumas was simply an extended pattern of the enlarged communal house peculiar to the village Indians. While its proportions were larger and its construction of a better character than the other dwellings, it appears to have been an ordinary affair as compared with the vivid descriptions of the Spanish explorers. The location of the Pueblo in the valley of Mexico gave it important economic advantages, and its population, while not as large as that stated by the Spaniards, was much larger than that of any Pueblo before or since. It possessed, however, all the economic characteristics of the village. It was economically isolated, and it doubtless belonged to the village stage of economics. It would be interesting to speculate upon the economic growth to which it might have been subject, and the economic stage which it might have reached, had it been left unmolested.

The Sites of Cities are Natural.—Generally speaking, therefore, it may be said that the sites upon which cities arise are natural. The locations depend upon the topographical and geographical features of the surrounding territory. It has always been found difficult, if not futile, to attempt a city where nature did not intend that a city should be. An artificially selected site cannot be made the entrepot of trade and industry. There must be present the natural geographical advantages of location. Men have often thought that they could lay out city sites without reference to the natural conditions which must be present. After they have laid out their streets and mapped the site of the coming metropolis, reserving the lots for the city hall, the railway stations and principal public buildings, it always remains a site—on paper. The influence and wealth of kings, queens and nobles have failed to build up a city upon an artificially selected site. Emperor Joseph II. and the Empress were called upon to lay the foundation stones of the projected city of Yekaterinoslav in the Taurida. The map of the city was projected upon magnificent proportions.

When the Emperor had finished his part of the ceremony, he surveyed the barren plain and said: "I have finished a vast enterprise in one day with the Empress of Russia; she has laid the first stone of a town and I the last." All this has been frequently illustrated by the attempts to build cities in the West. They cannot be built on paper. Their location must be such as will encourage commerce to bring raw products for manufactures and take away and distribute the manufactured commodities. In a word, the trader, the artisan and the agriculturist must all be encouraged to make the place a center of economic activity, otherwise it will have no excuse for being a city. Without a location of the character specified one village will always remain a village, and with it a neighboring village will become a town and then a city.

The Early Maritime Trader has three characteristics

(1.) He is a traveler, an explorer, an adventurer, a person of note like Marco Polo. At the beginning of the occupation he goes coastwise and visits the towns of the neighboring coast. He takes away the surplus products of his own town and exchanges them for the surplus of the ports at which he touches. He does not have to go far to see strange sights and procure strange commodities. Each voyage is extended a little farther than the preceding one. He finally sails boldly out over unknown seas to unknown shores. If he ever returns it is with the hold of his vessel filled with the rare objects of unknown lands which become the luxuries of his own.

(2.) He goes in force. His ship is armed. He trades by wile and strategy. When he cannot make a fair exchange, according to his own notions, he seizes by force. Trade by fraud and violence, which characterizes barter between adjoining tribes of savages in the family stage of economics, still exists.

(3.) He deals in luxuries. At first the products of his own country are luxuries to the foreigners with whom he trades, and the strange commodities which he brings back are luxuries to his countrymen. Salt has frequently been one of the first commodities to be the subject of foreign commerce. It is then a great luxury. At a later period of the maritime

trader's career he handles luxuries of a different kind. They are commodities which minister to vanity and pleasure. The Italian city republics, at the height of their prosperity, were the intrepot of luxuries, the rare and costly products of India.

The Inland Trader, like the maritime trader, at first, goes in force. He must be armed to protect himself from that large portion of the community which exists by violence. He must have a retinue of followers to protect his goods. He makes his way "through a wilderness of taxes." If he goes no farther than the market town nearest to his own, he finds that he must pay a tax in order to trade there. He finds the townspeople banded together to control trade among themselves, and he must do business in subjection to their rules and regulations. He frequently goes, therefore, in company with a number of his own townspeople, so that unlawful exactions may not be made in order to secure trading privileges. The towns where the most security against robbery is furnished, and where trade regulations are most liberal, are the first to feel the effects of increasing domestic commerce. Other things being equal, they are the first to assume the proportions of a city. The first inland traders deal largely in raw products. They transport the surplus of one village to an adjoining village where it is needed. They are more like hawkers and peddlers going from place to place with their goods. When their stock in trade assumes some magnitude they are like the African caravaneer.

Markets and Market Days.—As the village grows in population it comes to have a market place with stated market days. The agricultural products of the surrounding country are brought in on the market days. The farmers exchange their surplus commodities among themselves and with the villagers for simple manufactures. When money comes into vogue there is a sale and purchase and truck economy disappears. The products which are handled in the early village markets are wholly domestic and are limited in variety. Foreign goods are first found at the great periodical fairs. Trade promises to be extensive enough at the fairs to attract traders from the distant market towns and from the maritime cities.

Stourbridge Fair.—It is worth while to take a glance at one of those ancient fairs, on account of the important economic features connected with them. The ancient fair at Stourbridge, near Cambridge, will serve as a type. Here might be seen monks from the priories of Maxtoxe and Bicester, although it was more than one hundred good miles away to either of those monasteries. With the monks came bailiffs from the estates of the great lords and earls within a range of fifty or seventy-five miles. They were intent on laying in the year's supply of provisions. They passed around among the various streets or alleys of the ground, each devoted to its particular product, and made their purchases. Perhaps the bailiffs brought with them surplus products from their estates for the purpose of exchange. Each article had its own portion of the grounds allotted to it. In one street were booths containing the pigs; in another those containing the sheep, and then would come the beeves. Another portion of the grounds was set off for the booths containing salt meats. Then there were booths for wine, wax, wheat, malt and salt. The men from each town were placed together as far as possible. They endeavored to occupy adjoining booths and they worked together for their common interest and protection. There were quarters where the servants stationed themselves for hire, each with a badge denoting his occupation. The carters with their whips; the cow herds with a lock of cow's hair in the hat; the farm servants with great boquets of grass and field flowers; the shepherds with their crooks; bricklayers with their trowels, and the various simple craftsmen with the implements of their craft. There were courts of pie-powder, said to be named from the expedition with which offenses were punished—before the dust was off the feet. Perhaps the term originated from the fact that the trader of the time was a dusty foot—he traveled with his wares to the fair.

The Ancient Origin of Fairs.—The great fairs which were common to all the nations of Europe within historic times, are usually ascribed to grants or charters from the kings or ruling authorities. It is a fair presumption, however, that they had their origin long before the existence of kingdoms or central-

ized authorities. They would naturally arise as soon as any considerable number of neighboring village communities came to produce a surplus of commodities. The villagers find it convenient to meet at a central point and at stated intervals, for the purpose of making exchanges. At the time of the conquest of Mexico, the Spaniards found a fair in operation, similar in many respects to the European fairs. The Fijians, when first visited by the early navigators, were in the habit of meeting, at stated intervals and at fixed points, for the purposes of barter. It was inter-island barter, just as the early European fairs were for the purposes of inter-village barter. Each Fijian island represented at the fair, corresponded to a village community. The economic importance of these fairs or markets lies in the fact that they are the beginning of the centralization of trade and industry. They represent the decay of the domestic system, when the family not only carried on agricultural operations, but also manufactured by hand whatever products it required, and the beginning of the commercial system, when the family confined itself to one or two occupations, and exchanged its few products for the handiwork of others.

Significance of the Trader's Employment.—When industrial activity is confined to village communities, there are comparatively few persons engaged in trading. The rise of towns means a great growth in the number of those who devote themselves to a mercantile life. But the towns exist because there are a large number of traders, controlling a large volume of trade. Wherever the traders find it convenient to congregate and exchange their wares, the resulting activity produces the market town for a large extent of territory. If the conditions are such that more and more traders are attracted to the town, it speedily becomes a commercial and industrial center. Artisans find opportunity to exchange or sell their wares. The trader or middle-man must rely largely upon the labor of others for the production of his wants. Therefore, both the artisan and the agriculturist of the surrounding country find opportunity for making exchanges. The division of employments is enlarged, not only by the addition of the trader, but by the addition of the craftsman whom we shall

discuss in the succeeding chapter. The last vestige of individual, economic isolation, practically disappears. The merchant procures his agricultural products by exchange. The farmer procures his utensils by exchange. Those persons devoting themselves to a particular kind of labor, now become dependent for the satisfaction of the majority of their wants upon the economic activity of people devoting themselves to other kinds of labor.

The Modern and the Medieval City.—It was said in an earlier part of the chapter that no part of the western hemisphere has passed through the city stage of economics. Its aboriginal inhabitants were found either in the family or in the village stage, and none of them progressed to a higher stage. So far as they exist to-day, they either remain in the same economic state, or else they have experienced the retrogression which follows the imposition of a higher civilization upon a lower. The whole country, following the discovery and occupation by the various European nations, became nationalized. Its economic life was moulded by the exercise of national authority. The cities which have arisen bear no resemblance to the medieval municipality. They have little or no separateness of economic interests. Their manufactures come from without. They sell their own manufactures without. Their industries depend upon the prosecution of industries in many and distant parts of the nation. Reference is frequently made to some particular city as being enterprising and flourishing. A little closer study reveals the fact that only a small portion of its prosperity is due to internal causes. The prosperity of the modern city depends upon the prosperity of the nation as a whole. Its economic interests are closely interwoven with the economy of the nation. Whatever affects the national economy, affects each city. The city is but a member of the body and derives its life and health from the body.

It was not so with the medieval municipality of Europe. At first its economy was wholly disconnected from that of every other city, and from an economic standpoint it was no part of the nation. Trade and industry were wholly controlled from within. Its economy was purely local. Its trade was inter-

municipal. Even after a centralized, national authority began to legislate and look after economic matters, the cities maintained their economic autonomy by charters which they secured from the crown, sometimes in return for civic influence, sometimes as a condition of rendering civic allegiance, and sometimes by outright purchase. Their treasuries were full, and royal treasuries were in a precarious condition.

The Medieval City the Pattern.—It follows from what was said in the last paragraph that discussion of city economics relates mainly to the condition of things which existed among the towns and cities which arose in western and central Europe during the middle ages. The economic conditions connected with their origin and development, are known, to a partial extent at least, and can be classified and analyzed. In the Orient the rise of cities from an economic standpoint is beyond the pale of historic research. Details, especially relating to economic matters, are wholly wanting and can never be supplied. Inquiry, therefore, relating to the character of municipal economy in the East, prior to the existence of national economy and the nationalization of cities, must be vague and unsatisfactory. It is understood, therefore, that the illustrations of city economics relate to the medieval European cities. The language used relates to the more universal economic features of the time, such as characterized the economy of all the towns and cities of central and western Europe. If reference were made only to the English towns, a more precise terminology would need to be adopted, and it would be so if the discussion related to the towns of Flanders or the German towns. The aim is to state the economic characteristics common to them all, although existing in some cases in a less developed state than in others.

The Right of Burgess-ship.—In reading the history of the cities of the middle ages frequent reference will be found to the burghers and the burgess rights. The burghers or burgesses and their rights are so closely connected with municipal economy as to require brief attention. To comprehend the subject it will be necessary to go back to village economics and a time when the land was owned by the village community.

At first it was cultivated by the villagers in common. Then it was parceled out into holdings, and a holding was allotted to each head of a family to be used and cultivated by him until a re-allotment. At first, perhaps, the distributions were each season. Finally the holding was used and occupied for longer and longer periods of time, until the holder came to have a right to make improvements and to sell them at the next re-allotment. Finally, through many intermediate stages, each member comes to hold perpetually for himself and his family the last portion of land allotted to him. The last step is private ownership in the holding. The practice of making allotments is wholly abandoned. About this time, however, the community has greatly increased in numbers. Newcomers have appeared. There is no land to be allotted to them, however. It is required for the original villagers or their descendants, or has become their private property. Connected with the holding of a portion of the land there are certain civil rights and economic privileges. These privileges increase and become more exclusive with the growth of the village economy. The original landholders and their descendants band together to keep the newcomers from securing the privileges connected with citizenship or membership in the community. They retain unto themselves exclusive jurisdiction over the civil affairs of the community. They alone have a right to appear in the village assembly, and they make the holding of land and that right to appear, the test of citizenship. When the village becomes a trading town, they have retained all their old privileges, and the privileges themselves have assumed a new importance. They become the burghers of the town. No one else has the franchise, or rights of citizenship. It is a right much coveted and religiously preserved among the burghers themselves. They impose restrictions on the acquisition of citizenship, so that it cannot be easily acquired. Among the privileges which the burghers assert for themselves, is :

The Trading Privilege.—The right to carry on an independent trade was connected with the right of burgesship. The burghers as a body reserved to themselves a monopoly of trade. They enacted market regulations by which they sought to keep

out traders from other towns. They banded together for their common advantage, both in controlling the home market and in procuring trading rights in other towns. Every one who did not possess the rights of citizenship was, to them, a foreigner, and therefore the residents of the town who did not have the franchise, as well as the inhabitants of other cities, were debarred from trade, excepting under regulations which were supposed to work to the advantage of the burgher class. A stranger could not sell to any one except a burgher, nor buy of any one except a burgher.

The Merchant Gild.—The discussion of the rights of burgess-ship and the burgess trading privileges, leads to one of the most important subjects connected with the economics of the city—the merchant gild or hanse. It was a union for economic purposes of the inhabitants of each town who possessed the right to trade. A numerical statement of the chief economic features of the merchant gild would embrace the following:

1. *Its Membership.*—This consisted of the burgesses and such persons as were admitted to the rights of citizenship, or upon whom the burgesses conferred trading privileges. Among the earlier gild organizations, possession of the burgess-ship or citizen franchise, was the prime requisite for admission into the society. At a later date merchants from other towns were admitted. Membership once acquired, usually descended to heirs, and could be transferred. The membership of the early gilds was not by any means composed exclusively of merchants, or those who devoted their time to trading. The right of burgess-ship involved the holding of land, and at first many of the burgesses were agriculturists. At the same time, however, their right of burgess-ship entitled them to membership in the gild, and they usually took advantage of it. Indeed, they were obliged to take advantage of it in order to freely sell their own products and buy of others in the open market.

2. *Its Objects.*—The main purpose of the merchant gild or hanse was to obtain and maintain for the burgess members, the exclusive privilege of carrying on trade in the town—"A privilege," as Mr. Ashley says in his *English Economic History,*

"which implied the possession of a monopoly of trade in each town by the gild brethren as against its other inhabitants, and also liberty to trade in other towns."

3. *Its Organization.*—The body held stated meetings, which in England were called "Morning Speeches." There were one or two annual meetings of a more solemn nature. At these meetings regulations relating to the exercise of trade by the members as against non-members, were presented and adopted. It was frequently ordered that no sales should be made, excepting to burgesses, and no purchases, excepting from burgesses. Breaches of the rules were punished by fines, or by suspension of the trading privilege. Licenses to trade were issued to non-members and the tolls went into the gild treasury.

The Civic Authority of the Gild.—The authority exercised by the gilds in the enactment and enforcement of trade regulations was similar to the authority exercised by modern municipalities in the enactment of local municipal ordinances. The possession of such authority by the gilds is explained by the fact that their membership composed also the ruling class of the town. The gild organization was often superior to the civil organization, and the gilds had no difficulty in procuring from the civil authorities the grant of such powers as they desired. Even after the crown came to take a hand in legislation, the gilds possessed sufficient influence united with that of the civil authorities, to obtain for the gild or the town, charters conferring a monopoly of trade.

The Practical Lessons of the Merchant Gild System.—Discussion of the merchant gild system and of the control of trade by the burgess class may seem to have little practical value, because it represents a system that has fallen into disuse. The same criticism may be urged against much of the discussion under the head of economics of the city. There are practical and important lessons connected with these subjects, however. While the merchant gild system has disappeared with the disappearance of municipal economy, its mark is found impressed upon the economy of the modern nation. The regulations adopted by many modern nations for the control of international commerce by and in behalf of the citizens of the

nation, are the legitimate fruit of the regulations of the medieval towns for the control of inter-municipal trade by the townsmen. In the family stage of economics, trade was a tribal matter. In the village stage the trading privilege of the individual was slightly enlarged, but the community as a community regulated exchanges. We have just seen how independent and exclusive trading privileges were conferred upon, and asserted by, the individual in the city stage of economics, subject to such restrictions as were supposed to work to the advantage of the town. When the national stage of economics is reached, it will be seen that while every citizen of the nation is free to trade at will with every other citizen, and the trading privilege becomes universal throughout the nation, yet attempts are made to so regulate international trade and restrict trade with citizens of other nations that the nation at large may be benefited. The regulation of intermunicipal trade during the stage of municipal economics should be understood therefore, before a clear conception can be had of the nature and origin of the regulation of international trade in the succeeding stage of national economics.

CHAPTER II.

THE CRAFTSMAN.

The Growth of Manufactures.—In the village community there were the smith and the carpenter and representatives of such crafts as were necessary for the daily life of the community. The smith repaired the plows of the community, and made them as they were ordered. He also made the iron work which was used about the carts and the rude agricultural implements. The village craftsmen manufactured as their handiwork was wanted, using the materials which the customer brought them. Their existence, however, implying the presence in the community of a class of persons devoted to craft work, brings forth another distinction between the economics of the family and the economics of the village. When family economics prevailed there was no artisan class, no persons who devote themselves to craft work as an occupation. "Their appearance marks the second stage in the history of industry, the transition from the family system to the artisan system." But the merchant class precedes the artisan class. The growth of the merchant class, which was described in the last chapter, accompanied by the rise of cities, produces a state of affairs in which a large number of persons are devoting themselves to trade. This means that a corresponding number of persons must devote themselves to the work of transforming the raw agricultural products and the raw foreign imports into manufactured commodities such as will satisfy the wants of the great commercial class. Manufacturing for the open market now commences in earnest. Commodities are made for the purpose of supplying the wants of persons outside the town and outside the immediate group to which the manufactures belong. The smith differentiates into the blacksmith, the wagonmaker, the plow maker and the tool maker. The weaver ceases to be tailor and

dyer also, and two more occupations connected with cloth arise. The leather merchant ceases to be butcher. So it goes through all the branches of industry.

The Burghers and the Artisans.—The village craftsmen were members of the communal village organization—that is, they had the right to hold land and the right to appear in the village assembly. They were everywhere the equal of the other members of the community. Sometimes they occupied a higher place in the community councils than other members and were exofficio village officers. When the village becomes a trading town they have all the rights of burgess-ship, including the right to engage in trade. Trading is the most honorable, as well as the most profitable occupation of the time. The burghers, possessing exclusive trading privileges, gradually abandon the prosecution of their crafts and become merchants, members of the merchant gilds and identified with the ruling class of the towns. Their places as artisans are filled by newcomers from the surrounding country, and from the neighboring villages which are not fortunate enough to develop into trading towns. The newcomers are not citizens; they are not landholders and have not the rights of burgess-ship. They cannot become merchants. They become an artisan class and in many cases there begins a struggle between this artisan class on the one hand and the merchant-burgher class on the other, which continues until the towns are nationalized.

The Craft Gilds.—The members of the new artisan class find themselves face to face with the governing body of the town composed of the burgher merchants. The merchants control the municipal organization, and endeavor in all ways to make themselves supreme in the exercise of civil authority and to preserve their monopoly of trade. It is about a century after the institution of the merchant gilds. The artisans find that the merchants, by means of their gilds, are perfectly organized. The merchant gild system, furthermore, has differentiated. Instead of one gild for all merchants and all persons engaging in trade, each branch of trade now has its own gild. The combination for the preservation of the old rights remains unbroken. The various merchant gilds com-

bine for the preservation of the old merchant rights. The artisans find it necessary to organize also, if they are to secure either the rights of burgess-ship or the liberty to carry on their crafts independently of the authority of the burghers. The result is the craft gilds.

The Character of the Craft Gilds.—According to the definition of Ashley, they "were associations of all the artisans engaged in a particular industry, in a particular town for certain common purposes." Briefly stated, these purposes were, to wrest from the burgher-merchant oligarchy, rights of burgess-ship and the right to have independent craft organizations or gilds. The artisans want to be citizens and they want to regulate the industries with which they are connected. They desire to exercise jurisdiction over their own members apart from the authority of the municipality, and apart from the authority of the trading monopoly. The gilds of the weavers, assisted shortly by those of the bakers, led the struggle. The contest was similar in character in all the European towns.

The Success of the Craft Gilds.—The struggle of the craftsmen for civil and economic rights was a long one. The time required was considerable, because it meant a great economic change which would naturally occur very slowly. The merchant burgesses gradually lost the exclusive rights of burgess-ship which they had always asserted, and the craftsmen acquired equal rights. The artisan class was admitted into the councils of the municipalities upon equal terms with the burghers, and procured municipal legislation in favor of the craft gilds, of the same general character as that which the merchant gilds had formerly procured, so that by the time the municipal system of economy reached its highest development, the craft gilds came to exercise jurisdiction over all branches of industry. They regulated hours of work, the instruction of apprentices and described minute details relating to the conduct of each craft.

The Practical Lessons of the Craft Gilds.—The story of the development of the craft gilds has a lesson as well as that of the merchant gilds. It is valuable, not only as bear-

ing upon the organization of industry during the economic stage to which it relates, but as representing nascent industrial organization. The craft gilds represent the beginning of the organization of labor, which has attained such magnitude and perfection in modern times, and a just conception of this modern or national organization must include some knowledge of the earlier or municipal organization. The rise of the craft gilds and the organization of the crafts have a practical bearing also upon the subject of the rise of economic classes, which is discussed in the following chapter.

CHAPTER III.

THE RISE OF ECONOMIC CLASSES.

The Early Communal Life.—Turning back to the chapters on "The Capital of the Family" and "The Village Community" it is found that in the earlier economic stages there are no distinctions of class. It is a communal life involving community of living. Every member of the primitive village community has an equal interest in all the produce of labor, and property is held and enjoyed in common. Every man is supposed to do as much for the common support and subsistence as every other man, and all the members of the community are equally rich. The customary duty which devolves upon each member of the community to work for the common welfare, was rigidly enforced among the partially agricultural Indians of America. Living in large households, the matron of the house was invested by custom with considerable authority over the members of the group. She made each one perform a proper share of labor, and the brave who would not hunt or hoe corn was soon driven out. In modern times the economy of the communal life is illustrated by the economic systems of some of the partially agricultural tribes of Africa and Oceanica and among the indigenous tribes of Algeria.

A Landless Class, may originate (1) by conquest or (2) in the orderly course of economic development.

(1.) In case of the conquest of one people by another the conquerors enter into the actual occupation of the conquered territory. They do not cultivate the land themselves but simply assert the legal ownership. For the purpose of a division of the spoils, the whole territory is apportioned among them without reference to the presence of the original inhabitants. Each victor becomes the lord of the domain apportioned to him and the original dwellers are his vassals. He reserves for his individual use a portion of his territory and subdivides

the balance, setting off a subdivision for the use of the vassals whom he is disposed to favor. Those who receive allotments render their dues to the lord by contributing to his storehouse a customary portion of the produce of their holdings, or by working his land. Sometimes they do both. In the Chapter, "The Land and the Laborer," in connection with the discussion of serfdom, statement was made of these facts from a slightly different point of view. Those who hold land at the will of the lord or by *tenure* are his serfs. They emerge from the condition of serfdom very gradually. The basis of their growth out of the servile state is an increasing proprietory interest in their holdings. The fact that men have once received an allotment gives them a continuing right to one, and finally custom decrees them a vested right irrespective of the will of the lord.

Thenceforth they are factors in the community. A sharp distinction is drawn between them and the men who fail to receive an allotment from the lord. One is the landed class and the other is the landless class. The landless class must, perforce, take service with the lord or with the richer vassals. Having once become serving men, they and their descendants remain serving men for generations and until the economy of land has taken a different form.

(2.) Assuming an early village community of freemen, each member is entitled to the use of a portion of the arable land. By degrees the right ripens into a right of permanent possession, and finally the land becomes private property. But during the time these changes in the organization of the land are taking place, the village is increasing in numbers. Outsiders are coming in. If the village happens to become a market town the influx of newcomers is correspondingly large. It is at all times, however, difficult for a newcomer to acquire membership in the community. Membership is associated with the right to hold land. But the land has been parcelled out. Unless one of the members of the village dies, leaving no heirs, there will be no opportunity for newcomers to obtain a share. Most of them must remain landless. They become a non-member and landless class, as opposed to the villagers prop-

er, who are the landholders. Of course, the body of this non-member class is at first very small, as compared with the whole population.

Medieval and Modern Citizenship.—In modern times citizenship is acquired by residence, and the rights of citizenship have come to be associated with a man's domicile. This fact is likely to beget misunderstanding of the nature of medieval citizenship. A mere resident of the medieval town or city was not "free of the city." He might reside there for years and not become a citizen. The distinction was so clearly pointed out in the discussion of the burgher-merchant class that it is hardly necessary to repeat it here. The newcomers in the town, referred to in the preceding paragraph, were residents merely and not citizens. The body of residents, however, grows very fast, as compared with the growth of the citizen class, and the classes begin to entertain a mutual distrust and suspicion of each other. The old class—the citizens proper—possessed of the rights of burgess-ship, look upon the new body of non-burgesses as a hostile force. This new body of residents is composed mainly of craftsmen.

The Burghers and the Craftsmen.—In the last chapter, the contest between the merchant-burghers and the craftsmen was set forth in considerable detail for the purpose of illustrating the development and organization of trade and industry. That contest is now worthy of careful study as illustrating the rise of economic classes. It is not necessary to re-state all the features of the contest. It may be now viewed in a new light and for a different purpose—as a contest of economic classes. It was a collision "between the old trading and the new industrial elements." The new elements organized, for the purpose of not only acquiring rights of citizenship, but of protecting class rights. In the end as we have seen, the new body of craftsmen succeeded in acquiring equal rights with the old body of burgher merchants, and in some cases they became uppermost. The environment of the city is enough to instill a desire for economic equality in the minds of the new class of craftsmen. The saying of the time was: "City air makes free." In many instances the members of the crafts come

from the rural districts where the feudal system and the holding of land by tenure still exists. In the city they find that the citizens own the land and are freeholders. The incentive to rise in the economic scale, is strong, therefore.

Differentiation among Crafts.—After the craftsmen have obtained the rights of citizenship equally with the old burgher class, and manufacturing has become a stated employment, there begins a differentiation of employment among the craftsmen. Prior to this there is little distinction between employer and employee. The master and the journeyman work side by side. Each man owns his tools and toils with his hands. There is no collision of interest. The journeyman may aspire to the hand of the master's daughter. But now capital becomes more important. It becomes impossible for every journeyman to set up in business for himself, as formerly. The body of craftsmen has become so large that few of them can look forward to a time when they will be master craftsmen. Instead of the raw material being brought to the artisan to be worked up to order and made into such manufactured commodities as the owner of the material desires, it begins to be the practice for the artisan to buy his own materials and make up a supply of goods for future demand. He becomes a manufacturer. As a result of these things there comes into existence among the craftsmen "a working class," as distinguished from the employers, and with the introduction of the working class comes the collision between employer and employee, and the perplexing economic theme known as "the labor question."

Modern Class Divisions.—In modern times possession or non-possession of land has ceased to be the basis of the division of classes. There is no landless class or landed class. It is true that one part of the population owns land and the other part is landless. It is not because of the organization of land, however. There are no conditions attached to ownership which render it impossible for some to obtain a portion. This is especially true in the United States. Every man may be a landholder. Distinctions of class now relate to the quantity and the character of the capital, either land or personal property, possessed by the individuals composing the class, and the class divisions are as follows:

1. *The Autonomous Producing Class.* This division is made upon the basis of the quantity of capital possessed. The members of the class have sufficient capital to keep them employed, and by personally managing and utilizing it, they derive an income sufficient for their support. They are not compelled to sell their services or to employ the services of others. In many respects it is a desirable economic state and, other things being equal, that nation which possesses the greatest number of this class is less likely to experience civil or economic revulsions. A large number of small landholders—peasant holders they are called in Europe—in proportion to the aggregate population, will tend to ensure a well rounded national economy.

2. *The Professional Class.* Professional men, like lawyers and physicians, are autonomous producers. They support themselves by the personal management of their capital, which consists of their technical skill and training. This capital, however, is so different in character from the capital of the peasant landholder, for instance, that the class may be placed by itself. The division is according to the character of the capital, not according to the quantity.

3. *The Employer Class,* includes all those who possess such a quantity of capital that they cannot utilize it by their own labor. They are compelled to hire the services of others to assist them. Their share of the results of labor are the "profits" of the undertaking.

4. *The Employe Class.* The employes, like the professional men, are distinguished by the character of their capital, which consists of their muscular and mental capacities. They have no material possessions to manage and must sell their services. Their share of the results of labor is wages. This class includes all who serve others for fixed wages. The term "laboring class," as commonly used to distinguish the employe class from the other classes, is misleading. It assumes that no one else labors. The employer is frequently the hardest worked, most care-worn person about the establishment. Every living thing labors. Labor is one of the conditions of existence.

5. *The Pauper Class,* is not strictly a division upon the

basis of the quantity or the character of capital possessed, but it is nevertheless worthy of consideration as one of the great economic classes. Much economic legislation looks toward the reduction of the numbers of this class and the prevention of pauperism. The class furnishes one of the great economic problems. It is supported by taxation. The employer pays taxes according to the amount of his capital. But in proportion as his taxes are large, he will have less profits to distribute among his employes in the shape of wages, and therefore taxation falls upon the employe also. The pauper class therefore, and the criminal class also, are supported by all the other classes combined.

Classes not Castes.—Every person, especially in the United States, has the power to belong to either of the economic classes which have been mentioned. It rests with him. The classes are not like the castes of Asia. Membership in the caste is determined by birth, and once a member, always a member. The child belongs to the caste of its parents, and there is no possibility of rising. It is an immutable social order. Class is not a social order, but an economic division. The better teaching of economics is that every man is the arbiter of his economic state, and there is no "law" which relegates an individual to a particular class, without hope of escape.

CHAPTER IV.

MONEY THE MEDIUM OF EXCHANGE.

The Common Third Medium of Exchange.—In the previous chapter entitled "The First Forms of Money," there was a statement of the means by which exchanges were facilitated, before the introduction of coinage. It consisted of the use of a common third medium selected with a view to the universality of the demand for it combined with its divisibility, durability and transportability. The commodity employed as a common third medium of exchange assumed a higher character as industrial society developed. In the hunter state, the skins of fur bearing animals formed an appropriate medium of exchange. In the pastoral state, the cattle became money. In the agricultural state, the cereals were used. Even the very best of the methods of exchange, which could result from this style of "trucking," would be inconvenient as compared with modern methods. But economic activity was carried on under great inconvenience as compared with the facilities of to-day, and to-day the precious metals are deemed none too good to form a medium of exchange.

The Rise of Trade, which takes place along with the rise of towns and cities emphasizes the need of a more universal medium of exchange. It must be a commodity for which there is a more universal demand than for any commodity which precedes the age of commerce. It must be more durable and bear transportation better. It must be subject to greater divisibility. For instance, Venice was trading with the far east. Venetian ships came home loaded with spices, dye stuffs, precious woods and the luxuries of the east. The localities where the ships were loaded and where the goods were obtained, had an entirely different civilization from that of the west. The wants of the eastern people differed entirely from

the wants of the western people. The Venetian merchants must procure their cargoes in exchange for commodities other than the commodities in common circulation in the west. The division of employments became enlarged with the rise of commerce and the growth of cities. When men devote themselves to one kind of labor—to the production of one class of wants, all their other wants must be procured by exchange and the number of exchanges are indefinitely increased. The medium of exchange must be more perfectly adapted for its office.

The Higher Qualities.—Furs, cattle, and grain did well enough as mediums of exchange when the wants of the people were few and simple in character. Wants have now become more elevated. More costly mediums of exchange will naturally be chosen, administering to the more elevated wants. The commodity which will meet the demands of trade must have the greatest possible circulating capacity. There must be the greatest possible demand for it. It must be acceptable to all persons, at all times, in all places. It must be uniform in value throughout the world. The man who has this commodity must be able to exchange it for any other commodity which he may desire, at any time and at any place. Finally, the commodity must have the sanction of organized civil government and it then becomes what is called money.

Advantages of the Precious Metals.—They have a number of characteristics and qualities which give them a peculiar fitness for the purposes of a medium of exchange. There is their costliness and rarity combined with the amount of labor necessary to produce them. There is a certain uniformity in their distribution in the hemispheres. They have great transportability, that is, they are slight in bulk as compared with their exchangeable value so that large payments may be made without excessive cost of transportation. Their durability and pliability give them a mechanical fitness for coinage. Not the least important characteristic is their uniformity of quality. Gold is gold and silver is silver, wherever found. Another important feature is their diversity of use, and consequent uniformity of price. Inexpensive commodities are subject to great

fluctuation in price. The fact that they are capable of being employed for other purposes than for coinage, gives them both a value in use and a value in exchange.

Significance of the Money Economy.—The money economy which follows the rise of commerce is the natural outgrowth of the truck economy which precedes it. Money was doubtless used as a common measure of value before being employed in transactions as a medium of exchange. The use of it brings men more directly into economic dependence upon each other. The absence of it tends to isolate men in their economic activity. When truck economy was prevalent every commodity had two functions, it was both goods and money. With the era of money economy, money and goods are separated. The use of money is a great stimulant of commerce. The villager is no longer obliged to exchange his products in the village. He can go into the market town and sell his wares for money and purchase what he wants. If he wants a plow and there is none in the market, he can put his money in his pocket and look for a plow elsewhere. If his goods come to more than the price of a plow the surplus can be kept for future purchases.

The Four Functions of Money.—We are now ready to state the uses or functions of money, as follows:

1. *A Measure of Value.*—Suppose a peasant farmer of eastern Russia goes into one of his primitive markets to sell an ox which he has reared. He wants a fur coat. He finds a furrier with such a coat. They agree, however, that the ox is worth more than the coat. In other words, the farmer has put more labor into the raising of the ox than has been required of the furrier to make the coat. The worth of commodities is the amount of labor it has taken to produce them. It looks as though the trade would be blocked. It happens however that tea, pressed into little bricks, is in universal demand. Its value is well known. The furrier might not want the ox, but a good supply of tea would come handy for his own use and for exchanging. The farmer exchanges his ox for tea bricks. He then turns around and gives the furrier as many bricks as will equal the value of the coat. Tea has acted as a measure

of value. It measured the value of both the coat and the ox in the exchange. Whenever money is used in such a transaction, it becomes a measure of value.

2. *A Medium of Exchange.*—In the second place money is a medium of exchange. In our illustration the tea acted as a medium of exchange. It was something which all the people in the market wanted. The farmer trading his ox for it might get more than he could consume himself, but it is perfectly divisible and he could exchange his surplus for other wants. Even in very rude society, direct barter is very inconvenient. It is no easy matter for a man to find someone who wants his surplus of one commodity and who has a desired surplus of another commodity. In a complex state of industrial society direct barter is impossible. A pulpit maker might be hungry for a long time before finding a man who would exchange provisions for a pulpit. To obviate the difficulty men agree upon a universally acceptable commodity which shall stand as a middle commodity or a medium of their exchanges. The precious metals, in the form of money, have so far been found to be best adapted to fill the place of this middle commodity.

3. *A Standard of Value.*—Money is also a standard of value. The tea for which the Russian farmer exchanged his ox was used as money and became money because it had a natural purchasing power arising from its general acceptability. The same is true of the other commodities which have been used as money by various peoples. Tea, however, is likely to vary in price from year to year. A great crop causes its value to fall and soon reduces its purchasing power. The farmer who exchanged his ox for it would have hesitated to make the exchange unless he could get rid of his surplus almost immediately and before its price dropped. He would want a commodity which would bring him as much as he allowed for it at any future time, provided he could get such a commodity. Money in the shape of the precious metals would be such a commodity. People who exchange their surplus for it, know that they can take it whenever they get ready to purchase and exchange it for other wants. If they sell on credit, they know that when pay-day comes they will get a commodity in payment

having as much purchasing power as on the day of sale. Its value is reasonably fixed and it thus becomes a standard of value.

4. *A Store of Value.*—The Russian peasant who exchanges his ox for tea bricks and then migrates to America with his wealth in that form, would be worth much less after arriving here. His tea bricks would not be in demand. The commodity which is to take the place of money must be acceptable the world over, so that value may be stored up and carried from one part of the globe to the other without depreciation. What commodity is better adapted to be a store of value than the precious metals?

Government Coinage.—The precious metals in their natural state will fall short of performing the four functions of money which have just been enumerated. They must be coined or minted into forms of certain values under the sanction of government. The raw metal must be fashioned into pieces of prescribed weight and fineness, and this must be done by government in order to insure the proper weight and purity. Government can do nothing more toward creating money than lies in the regulation of the weight and fineness of its various coins. It can prescribe the number of grains of gold which shall go into a dollar just as it can determine how many pounds of wheat shall make a bushel. It cannot take that quantity of gold which cost only a dime to mine and mint and is therefore worth only a dime in the market and make a dollar out of it. Government may stamp it a dollar and call it a dollar, but it will not pay for a dollar's worth of labor or buy anything which has cost a dollar's worth of labor. You will understand now what is meant by people who speak of money as a creation of government. Government legalizes the coinage and declares what coins we shall have, but does not create money or create value. Gold and silver as well as all other commodities are worth just what it costs in labor to produce them. These facts have such economic importance that they will be repeated in connection with the discussion of "The money of the Nation."

Municipal Economy Summarized.—At the end of Part I

there was a summary statement of the controlling features of the economics of the family. The same plan was pursued at the conclusion of Part II, and the main characteristics of village economics were summarized. A brief summary of city economics will now be in order.

1. *Economic Supremacy of the City.*—Agriculture has been growing all the time and the condition of the rural districts has been greatly ameliorated, but the agricultural life has lost its old economic importance. It comes to the front again some centuries later. The city is now supreme in the land. It is the highest economic factor. The industrial life of the time centers toward it. It acts upon all the elements of industrial society as a magnet upon a mass of iron filings. It is not only the economic factor, but it is the highest political factor. Village economy has differentiated and the higher city economy is the result.

2. *The Rise of Trade.*—Trade is no longer desultory as in the family and village stage. It is systematically pursued by men who are traders by occupation. They become the middle men and go-betweens of those who have exchanges to make. Industry is greatly facilitated because the individual producers who desire to make exchanges are freed from the trouble of finding each other, and a great amount of time is saved for other pursuits.

3. *The Control of Trade* is in the hands of the citizens proper—the landholding class, "who imposed restrictions on the acquisition of citizenship, with the object of protecting the interests of those already enjoying it; who acted together by market regulation and intermunicipal negotiation to secure every advantage they could over rival boroughs."

4. *The Rise of Manufactures.*—Manufacture as a distinct economic factor appears. It is another branch of industry as distinguished from agriculture and trade. The interdependence of the three industrial factors which marks the economy of the nation, is started upon its career. The craftsman or artisan appears and begins to buy the raw materials on his own account, and to make up a stock of commodities for future demand.

5. *The Organization of Industry*, commencing with the

organization of the traders and merchants for economic purposes and by means of the merchant gild or hanse, grows through the organization of the artisans as a class opposed to the trading class, to the organization of each craft. Every occupation that furnishes employment to a few men has its organization, and every branch of industry has its mystery, craft or art. Monopoly of industry is the object in each case. The town system is identical with industrial organization.

6. *Class Distinctions are Fixed,*—First, by the rise of the artisan class as opposed to the burgher-merchant class. Secondly, by the differentiation of the artisan class into greater and lesser crafts and the appearance of employers who do not work alongside of their employes as was customary with masters, journeyman and apprentice. This means the labor question and the beginning of the quarrel between capital and labor over the division of the profits.

7. *A Money Economy.*—Coinage is introduced. Before the institution of national coinage, each city has frequently its own monetary system. Without money, "the market" is local and truck economy must be practiced. By the use of money the market includes a wide area. A world market is now possible.

PART IV.

ECONOMICS OF THE NATION.

CHAPTER I.

THE INDUSTRIAL STAGE OF ECONOMICS.

The Nation.—It may consist of three conceptions, according to the standpoint from which it is viewed. Geographically, a nation is a people speaking one language, living under one government, independent of other peoples and occupying a continuous area. Politically, it is an organizatiou of the whole people for the purposes of mutual assistance from foreign interference, and for the promotion of justice among themselves. From an ethical point of view, the nation is said to be a "moral personality vested with responsibility and authority, and endowed with a peculiar national life." It is a life not possessed by the individuals composing it.

The Economic Nation.—These are the historical conceptions of the nation. Economics is more directly concerned with the economic nation—with that body of people which might meet the conditions of either or all of the foregoing definitions and possess still other characteristics. The idea of a union of people is involved in either of the historical conceptions. The economic nation may be a union upon the geographical, the political or the ethical basis, but in addition it is a union upon an economic basis. It is an industrial union, with a centralized authority which regulates economic action throughout the whole territory. There is great diversity of individual pursuits and interests, and at the same time a close economic interdependence of the individuals. The

aggregate economic activity of the people constitutes the economy of the nation. The great commercial city of the middle ages was, in many instances, a politically independent state, and to that extent it had a basis for a national economy. But its economic life was wholly controlled and directed from within. It was a nation composed of a single economic unit, and its economy was municipal. The economic nation is composed of a number of economic units, controlled as one by a widespread national authority.

Significance of the Industrial Stage.—The economy of the modern nation is frequently called industrial, because it marks the full and final co-operation of the three great factors of all economic activity—the co-operation of (1) external nature or land, (2) labor and (3) capital, accompanied by a minute division of employments and organization of industry. This co-operation originated with the municipal economy when manufacturing began to play a part in daily life. With the growth of manufacturing came the growth of capital. Capital then assumed a new importance. We hear a great deal about capital and labor, much less about labor and capital, although labor becomes an important economic factor before capital. Labor is the original factor and capital is its product in conjunction with nature. By labor is meant not simply muscular strength. It includes all the qualities of mind and the skill of intellect.

External Nature.—In the earlier stages of economics, external nature has everything to do with getting a living, and labor and capital very little to do with it. In the family stage the gifts of nature are the prime source of subsistence. At first, as in the frugiferous state, the only labor involved is akin to berry picking. The capital may be a rude bark basket for holding the berries. As men learn to direct nature for the purpose of increasing subsistence and satisfying increasing wants, labor becomes more systematic and capital more necessary. As population grows the greater is the necessity of controlling external nature which includes the things without value, as air and light, and those with value, like the soil, the trees, the mines and wild animals. Nature has never been

more lavish with her gifts at one period than at another. In modern times they are more extensively utilized and the utilization of them in getting a living depends upon the employment ef labor and capital.

Capital includes all the things which men gather together with the possibility of using them for the purposes of further production. It may be the rude basket of the savage berry picker, to which reference has been made, or it may be a wonderfully constructed machine used in the arts. "Land and labor are primitive forces. Capital is the result of human industry." It is an accumulation of the results of labor stored up for future use.

Co-operation of the Factors.—The three factors, consisting of nature, or, as it may now be termed, land, labor and capital, have always co-existed since life began. Getting a living has involved a co-operation of the three forces in all stages of industrial society. When co-operation is referred to as having commenced with the city stage of economics, it is for the purpose of calling attention to the fact that the three factors then began to exercise an equality of force. Prior to the existence of a municipal economy, there was a marked difference in their importance. In the family stage, nature is dominant. In the village stage, labor begins to play a more important part. In the city stage, capital assumes a new importance. This predomination of one of the factors shapes the economic life of the various stages. Having now reached the economics of the nation, we find a mutual co-operation and an equal importance of all the factors. Nature, in the shape of the agricultural soil, of the forests and of the mines, co-operates equally with labor and capital in the processes of satisfying our wants. For instance, there are fishermen to-day, as there were in the hunter stage. The modern fisherman, however, employs large capital in the shape of nets, appliances and ships. Fishing is no longer a by-employment. It is a stated occupation, involving systematic labor, and the fisherman relies on the activity of others for the satisfaction of his other wants. There are herdsmen to-day as of old, but compare the Hebrew pastoral patriarchs with the modern breeder of Jerseys. The

Jersey breeder does not migrate with his herds in search of pasture. He employs capital in the shape of stores of food. He expends much labor in the direction of his enterprise. This state of things emphasizes the progress of man in his contest with nature. Natural agents are appropriated in order to satisfy progressive wants. The utilization of natural agents by means of large capital directed by systematic, conscious labor marks the progress of mankind to the highest of the economic stages.

Nature and the Economy of the Nation.—The physical character of the national territory, relating to soil, water privileges and temperature, is to be taken into account in studying the economy of a nation. The importance of the soil as an economic factor relates to its desirability for agricultural purposes, as well as for the mineral deposits which may be beneath the surface. If it is a purely agricultural territory, agricultural pursuits will predominate. If there are large mineral deposits, together with resources of lumber, manufacturing interests will be encouraged. Extended water privileges, with sea coasts, bays and harbors, will encourage commerce. The temperature and climate will govern the character of the agricultural productions, and these combined will frequently determine the distribution of land into small or large holdings. The best territory is one made up of an elevated table land, sloping toward the sea. It would have the pasturage of Switzerland, the agricultural plains of the Mississippi Valley, the mineral deposits of Pennsylvania and Tennessee, the forests of Michigan and Wisconsin, and the harbors of our sea coasts. Large rivers for inland navigation would be quite an item.

Jural Organization.—Economic organization cannot always be studied apart from jural or civil organization. Economic activity is affected by legislation and administration. The political organization which will best encourage the economic activity of the individual citizen and direct it toward the aggregate well being, will produce the highest national economy. There must be a well organized political state in order to ensure the possession of private property under peaceful and orderly conditions. Without guaranty of the rights of property, economic progress is impossible.

Agriculture, Commerce and Manufactures, are terms frequently used in connection with the industrial stage of economics. They go hand in hand to make up the economy of the modern nation. Where they are found most evenly balanced, there is apt to be found the highest and best economic activity, and the most widely distributed state of well being. Agriculture begins in the village stage, commerce in the city stage, and manufacture, in the modern sense, commences in the national stage. It is progress, from the isolated economic life, in which activity is chiefly directed to the acquisition of the things which will satisfy wants of necessity, through the prosecution of a single, dominant industry, to the social economic life, in which activity combines direct acquisition, through the prosecution of all the industries, with the employment, as a means, of material things already acquired. Cities become nationalized, in that they depend upon the economic activity of each other. One city manufactures one thing that is wanted, another manufactures another. Commerce evens up by distributing the manufactures. The cities depend upon the agricultural country, and the agricultural country depends upon the manufactures of the cities. Each depends upon the commerce which distributes their several productions. The family economic life was for self. The village economic life was for the immediate community of the village. The national economic life is not for self, nor for the immediate community, nor for the nation. It is for others, although "others" may comprehend all the citizens of the nation. The more prosperous a city, the more prosperous are the neighboring towns. The more flourishing the towns, the more flourishing the adjacent village hamlets, and wide-awake hamlets are sure to belong to thriving farming communities. Franklin is credited with saying that there are three ways for a nation to acquire wealth: "The first is by war. This is robbery. The second is by commerce, which is generally cheating. The third is by agriculture, the only honest way." He would not have used that language in this day. It is too well established that an equilibrium of the three industries means the highest national welfare, and neither of them is blameworthy.

CHAPTER II.

LAND, LABOR AND CAPITAL.

The Subject-Matter of this Chapter.—In the preceding chapter it was stated that we have arrived at a period when the three factors of economic activity—land, labor and capital—assume an equal importance. Their mutual relations are the source of the main economic problems of the modern nation. These relations furnish not only the economic problems but the social problems also. In combination, they are the social-economic problems. The connection between economics and social economy is so close that one cannot be studied independently of the other. The object of this chapter is to outline the social-economic problems. The expression "organization of the factors," may be used to refer to the mutual relations which they sustain.

What is Involved.—There is involved, first, the growth of these relations from the simplicity which existed in the early economic stages, when every man was land owner, capitalist and laborer, to the complexity of modern times, when one man furnishes the land, another the labor, and a third the capital. This growth needs only incidental discussion, since it has been referred to in the chapters "The Land and the Laborer," and "The Rise of Economic Classes." More attention is required to an examination of the part which each factor plays in the production of all the wants of humanity and to the division of the joint product between labor and capital.

Land and Labor without Capital.—In order to see what the result would be if there were only land and labor, without proportionate capital, it will be necessary to refer to an earlier economic stage. When the Spaniards discovered Peru, they found a landed system similar to that which has been described as existing in the village community. The land was owned in common by all the inhabitants, and was cultivated in common.

There was a yearly division of the arable soil among all the people, according to rank. The division was made by formal ceremonies, and "to the sound of music." But the poor Peruvians had no draft animals, no plows, no farm machinery, no "fixed capital," as it is called, and could only produce the necessities required from day to day. They could never be a rich nation without a more even distribution of the three factors.

The Ownership of the Land.—This subject introduces one of the social economic problems. Stripped of verbiage, the problem resolves itself to this: Should the community own the land, as it did in the family and in the village stage of economics, or is private ownership best? There are many good and honest-minded men who believe that private ownership is morally wrong. They say that land is the source of all capital, and is the one thing which makes labor productive; that it is a natural gift to all men alike. They further point out that common ownership, as it existed in the village community, is the state of nature, and private ownership has arisen by the arrogant assumptions of monarchical chiefs, who have robbed and despoiled the people of their common proprietary interests. Let us return, they say, to the system under which each member of the community has a usufruct in the soil, and is entitled to a chance to make his labor productive. Let us do away with free trade in land, which is immoral and contrary to the plan of nature. Let the state own the land and regulate its distribution.

Land Nationalization, is the name given to one of the projects looking toward a wider distribution of the "natural opportunities" included in the term land. It involves the indirect control of ownership by the government through the imposition of taxation upon the land. The machinery of government and all expenses connected with the social mechanism would, according to this scheme, be procured from the revenue of the land. The state would collect the annual rental value of land in itself, apart from improvements. The private owner would be allowed to collect such additional rental value as might arise from the improvements which he has put upon the

land. The propriety of the scheme is founded on the supposed fact that the rental value of land apart from improvements is due mainly to the exertions of the whole community—to the institutions of civil and industrial society. This, substantially, is the land nationalization scheme originating with Henry George. There are some who decline to accept it in its entirety, but who think that land municipalization is worthy of consideration. The rental value of a vacant city lot, they would say, is ten times as great as the same quantity of land ten miles away in the country. The work of the community at large in building and maintaining the city makes the difference, and therefore the community ought to reap some of the increased benefit, by the municipalization of land. That is to say, the scheme may properly be applied in respect to city land but not in respect to agricultural land.

Private Ownership is Best.—Those who advocate the common ownership and control of the land, must claim for their scheme an advantage to the community. It is maintained, however, that private ownership is best for the community; that common ownership never resulted in profitable cultivation and in modern times when each acre must support a much greater population than in the village community stage of industrial society, the improvident methods of the olden time would never answer. It was not a difficult matter for a village community of a few souls to cultivate its land in common and divide the product, or to distribute holdings among the heads of families. When the community contains say ten thousand souls and each man is entitled to one ten thousandth part of the product or the usufruct of one ten thousandth part of the land, "selfishness would exhaust itself," in the scramble for shares and no civil government known to modern times would be equal to the task of controlling the allotment. Better the "evils of landlordism," which are small compared with the public benefits of private ownership.

Free Trade in Land, is increasing rather than diminishing. The world is going away from community of ownership, very surely. The return to it would mean an economic revolution of almost inconceivable magnitude. One of the problems in-

volved is the distribution among private owners. It is usually conceded that a distribution among a large number of autonomous producers, or, as it is called in Europe, peasant proprietorship, produces a desirable economy and guarantees the permanence of civil institutions. Will free trade in land, such as may be expected within a few generations, increase or diminish the division into separate holdings? On one hand it is claimed that the future organization of land will involve the control of large areas by single individuals. The advocates of communal ownership favor such control because they see in it the germs of their project. It is an approach toward the centralization of ownership in the state as the final owner. On the other hand it is claimed that free trade in land, the utmost freedom of transfer from hand to hand, will result in a multiplication of division.

The Economy of Nature.—It is said that there are places on the earth's surface, as in some of the Mexican valleys for instance, where one man's labor for one or two days each week, will support an average family. For instance, an acre of bananas affords the nutriment of ten acres of wheat for the purpose of supporting life. The productivness of labor as controlled by physical environment, will beget varying relations between the three factors. With the Mexican Indian who supports his family by working one or two days per week, the element of labor is unimportant. Neither is he required to store capital like the Dakota farmer. There is no impetus toward the accumulation of capital, however, since it is not necessary to store for a time of scarcity.

Allowing for Physical Environment.—Any statement of the economy of the modern nation, therefore, which does not take into account natural conditions of geographical location, of soil and climate, of the character and number of the indigenous food plants, of the resources of forest and mine, is likely to come out wrong in the end. If the productivness of labor is increased by reason of the peculiar physical environment, there is not only less incentive to accumulate capital, but capital will take the form of fixed and stated means, like utensils, of acquiring food and clothing for immediate use, while under

other conditions it will consist of a storing and accumulation of commodities for future use. When the two factors of land and labor are controlling without the intervention of capital, there is a lack of wants. Wants do not increase so as to produce the economic progress which always attends the increase of wants. Population itself fails to grow. The nations of antiquity rarely advanced to the industrial or national stage of economics because, it is said, the growth of capital did not keep pace with the growth of the other factors.

Modern Aggregations of Capital.—Historians tell of the great riches of the potentates of ancient nations. The lords and barons of medieval Europe are referred to as the possessors of great estates. The riches of these, however, were paltry, compared with the accumulations of some of the modern millionaires. The capitalists of old were relatively rich, rather than absolutely rich. Their riches stood out with prominence because of the paucity of the accumulations of the great mass of the people. The modern capitalists are absolutely rich. There are so many of them, however, and there are so many men who are nearly as rich, so many millionaires, and so few, comparatively, who are absolutely without any accumulations whatever—that the contrast is not striking. The evil connected with the great accumulation of capital is not so much in the possession of it, as in the foolish and vain display of it. It is the shoddy aristocracy rather than the real aristocracy that breeds discontent.

The Organization of Capital.—In the earlier economic stages, there is so little accumulation of capital that each man has no difficulty in looking after the investment and management of his own estate. In the rural villages of to-day, for instance, there are few men who cannot directly supervise the management of their interests. They can invest in various business enterprises, subject to their individual control, all the capital they possess. In the larger towns and in the cities, the number of men possessing large capital increases so rapidly, and business interests become so extensive and far-reaching, that one man's mind and one man's capital are insufficient. This leads to certain organizations for the better investment,

regulation and control of the capital of many men. Furthermore, the enterprises of the national period are so vast that one man's capital is insufficient to conduct them. We must consent to the organization of capital or go without railways.

Corporations—are illustrations of the organization of capital contributed by many men for a common purpose. A few years ago it was the practice to create corporations from time to time, by special charter. A corporation was then more directly the creature of the state. In recent times statutes began to be enacted by various states, authorizing the formation of corporations for certain specified purposes. A corporation for the purpose of transacting a business specified in one of these statutes might be formed without resort to the legislature, but if the business to be transacted was not enumerated, then recourse was had to the old form of special charter. It was progress, however, toward general legislation. We have come now to a time when many states have general corporation laws, whereby a corporation may be formed to transact any lawful business whatever. The generalization of legislation has become complete.

Corporation Evils.—The economic evils of corporate aggrandizement are, first of all, the crowding out of the small capitalist. The capital of many men is placed under the control of perhaps two or three master minds. The single-handed capitalist finds it difficult to survive. There is a growing tendency to incorporate this and that business enterprise in order to transact a larger volume of business and enlist outside capital in favor of those who actually attend to the business and draw the salaries. The result is frequent over-capitalization and the formation of "bubble" companies. The aggregation of capital is not without its advantages, however. It frequently decreases the cost of production. By means of the great sugar refining plants of modern times, sugar can be refined at a profit of one-eighth of a cent per pound.

Trusts and Syndicates.—The trust is a comparatively modern invention. The controlling feature of the trust is the pooling of the interests of a number of firms or corporations engaged in the same line of business. The object of the pool

is to control the market, raise the price of the commodity dealt in, and increase the profits of the interested parties. There are various modes of forming the trust. The methods may be generalized as follows: Several corporations, individuals or firms, engaged, we will say, in manufacturing tobacco, desire to form a trust. An inventory is taken and a valuation placed upon each plant and business to be put into the trust. According to the simplest plan an agreement may then be entered into by all the parties to the transaction, whereby each one shall render an account of the business transacted at stated intervals. The aggregate profits are divided upon the basis of the valuation which has been placed upon each business. A more formal plan involves the choice, usually from the number of those who enter the pool, of a certain number who act as trustees for the whole. The pooling agreement is made between the trustees and each member of the pool individually. The various businesses entering the pool may be conveyed to the trustees absolutely for the benefit of all. The trustees have power to restrict the output of each establishment, and they divide the profits. The valuation to be employed as a basis for the division of profits is agreed upon at the time of the formation of the trust and the figures are incorporated in the deed of trust. Very recently the formation of trusts by means of voluntary agreements in writing and through the medium of trustees, has fallen into disuse, and the method is employed which is referred to in a succeeding paragraph on Statutes against Trusts.

A Premium on Idle Plants.—The trustees having power to regulate the course of manufacture in each establishment, may at will, order any one establishment closed and the plant shut down. Professor Ely, in *Problems of To-Day*, says this was the result when the elevators at Buffalo were put into a trust. A number of them were lying idle the year round, but the proprietors drew just as great a proportion of the aggregate profits of the whole number of elevators as though their own plants were in operation. The result was that elevators were built, not with the idea of being used, but with the idea of compelling the trust to take them in and give them a portion

of the profits. The operation of the tobacco, sugar and cordage trusts, produces similar results.

Freedom of Capital.—The discussion of corporations and trusts brings out the fact that in modern times great freedom is accorded to capital. Formerly, there were various legislative restrictions which stood in the way when a man wanted to start a business. The regulations of trade and industry inaugurated by the medieval cities were continued into the national period. In the modern nation there is scarcely any restriction placed upon industrial enterprises, excepting such as the police power of the State exercises. By police power is meant the authority of the State to regulate business industries for the welfare and health of the people. It is rarely exercised for the sole design of regulating the use and investment of capital.

Statutes against Trusts.—The baneful effects of trusts upon trade and commerce have resulted in the enactment by Congress and by the legislatures of many States of statutes whereby trust combinations are illegal. There are spasmodic attempts on the part of public prosecutors to enforce the law when its violation becomes flagrantly public. To escape the ban of the law it is common for several firms or incorporations to incorporate. Instead of a secret trust there is a pretense of openly incorporating under the laws of a state where general corporation laws are favorable. The business to be incorporated may be in several states, but as corporations are allowed to carry on business outside of the state where incorporated, this does not stand in the way. Each business entering into the combination is turned over to the amalgamated corporation something as in case of the trust. The several owners receive capital stock of the corporation equal to the agreed value of their business. The profits of the combination are distributed in the shape of dividends upon the capital stock.

Monopolies are frequently confounded with the aggregations of capital represented by trusts and corporations. They are radically distinguished. A monopoly may be owned and conducted by a corporation, and it usually is, but corporate ownership does not necessarily cause a business to be a monopoly. The purpose of trusts is to create monopolies, but

monopolies are not always trusts. They are not determined by the extent of the business or the amount of capital engaged. Their popular connection with trusts and corporations arises perhaps from the fact that they are usually owned and conducted by corporations.

Kinds of Monopolies.—There are two kinds of monopolies with reference to their control and ownership and they are also divided into two classes with reference to their inherent qualities. With reference to control, monopolies are public or private. With reference to inherent quality they are artificial or natural.

Public Monopolies are owned and managed by Government for the public use and benefit. The postoffice is a public monopoly. The government does not allow private parties to carry letters. The army and navy are public monopolies. The government reserves to itself the exclusive right to maintain armed forces. The opponents of the Pinkerton system of armed guards, object to it mainly on the ground that it is an infringment of the public monopoly of that business as owned and controlled by Government. Coinage systems are public monopolies. Every State reserves the right of coinage. Monopolies of these kinds are of great public benefit. They illustrate the necessity of discrimination. Men who talk the loudest in condemnation of all monopolies are usually those who make the most ado when the province of a public monopoly is usurped by private individuals.

Private Monopolies are owned and controlled by private individuals for private ends and gains. Private capital is invested for the profit there is in the business. A great deal of economic discussion relates to questions of this character; which industries shall be taken out of private hands and made public monopolies? Ought the telegraph, a private monopoly in this country, to be made a public monopoly? Would it be for the welfare of the people if the government owned and operated all the railroads and kept private parties out of the business? Simple reference to these questions is all that is possible within the limits of this work. They are worthy of additional thought and examination.

Natural Monopolies.—The division of artificial monopolies is independent of the previous division of public and private monopolies. Private monopolies may be either natural or artificial monopolies. An enterprise which partakes of the character of a monopoly by reason of the very nature of the article with which it has to do, or the manner in which it is controlled, is a natural monopoly. Its own inherent characteristics causes it to become a monopoly. Common illustrations of natural monopolies are toll-roads, canals, wharves, ferrys, railroads and the water, gas, and electric light supplies of cities. The very nature of these enterprises is such that there must be a limit to the number of them. Street railways in cities are strictly natural monopolies. When one company has secured the franchise all others are practically barred out. There is a natural limitation to the number of companies which can occupy a street. Natural monopolies usually supply public necessaries. They are confined to particular territory. What they supply is subject to increase, without proportionate increase of cost, when the producing plant has once been set in operation.

Public Control of Monopolies.—The turning of private monopolies into public monopolies is peculiarly appropriate with reference to natural monopolies. Men who do not go to the length of saying that they should be owned by government, will admit that they should be subjected to greater governmental control by the imposition of greater legal restrictions. Their frequency is one of the arguments of socialism which demands the absorption by the state of all *natural* monopolies at least, and the interposition of restrictions upon their establishment. In many American cities the water works and gas works are the subjects of municipal ownership or control. Public benefit has resulted almost as a rule. Facts of this character furnish grounds for public ownership of all *private, natural* monopolies. Land is a natural monopoly. It is limited in quantity. There is no way of increasing the quantity. Should it be made a public monopoly? Should Government control its use and distribution?

Artificial Monopolies are those created by charter or

legislative enactment. They are not monopolies by reason of their inherent peculiar qualities. The Hudson's Bay Company was an artificial monopoly. Its charter from the Crown gave it the exclusive commerce in furs in North America. The banking business is sometimes a monopoly. The Bank of France is a monopoly. No other bank can issue notes. The Bank of England is a partial monopoly. It has the monopoly of issuing notes in London. In the United States free competition upon lines prescribed by government is the rule. The colonial history of America abounds with illustrations of artificial monopolies granted by charters issuing from various European courts which had, or claimed to have, territorial rights in the Western Hemisphere. When a hue and cry is raised against monopolies in general, it is well to remember that there has never been a time in the history of modern nations when fewer *artificial* monopolies existed than at the present day. In place of the medieval restrictions upon industry the tendency is toward freedom of industry. The growth of corporate franchise from the grant by special charter to the general authorization by corporation laws, illustrates the tendency. The medieval gilds were artificial monopolies. They regulated commerce and manufactures with an iron hand. It has taken centuries to leave behind the restrictive system which they represented and reach the modern freedom of industry.

Competition of Natural Monopolies.—The inhabitants of a city often express longings for another street railway company in order that there may be competition in the business. When another company has organized and entered the field, competition seldom results in any continued public benefit. Competition does not compete. The service may be temporarily bettered. There is frequently a permanent improvement upon the old order. It is not by reason of competition, however, because that rarely continues long. One company is sure to absorb the other and there is a natural monopoly still. The improvement is due to the differentiation following the disuse of the old system. On the theory that "competition is the life of trade," legislatures have passed laws forbidding con-

solidation between railroad companies, gas companies, and telegraph companies. Just as though a statute could overcome the inherent tendency of natural monopolies to combine and form a greater monopoly. There cannot be and there never will be competition between them.

Municipal Ownership of Monopolies.—There are many advantages in municipal ownership of water works, gas works, and electric lighting works. It is claimed that the city should own the various industries which affect the community at large, and for which its streets are utilized, just as much as it should own and does own the sewers. As a matter of fact the water works of most cities are now owned by the cities themselves. Private ownership of public works of that nature, is out of date. The tendency now is toward the ownership of gas works and electric lighting works. Statistics show that municipal ownership results in economy. In other words, that gas and electricity can be sold cheaper by the city than the prices charged by private monopolies. If the public business were transacted according to the methods by which individuals conduct a successful private business, the last argument against municipal ownership would fail. It cannot be said, however, that public business is thus transacted. It is too frequently under the management and control of incompetent politicians, prone to improvident methods which no prudent business man would introduce into his own business.

The Organization of Labor.—Having outlined the organization of capital, we are prepared to trace the organization of labor and its relation to the other factors. The organization referred to is that of the present or national stage of economics. The early growth of these factors has been set forth in previous chapters, as "The Capital of the Family," "The Land and the Laborer," "The Craftsman," and "The Rise of Economic Classes." The highest organization of labor, hitherto, was the craft gild. The craft gild, however, was not a labor organization in the modern sense. It embraced both employer and employe—both the master and the journeyman. The modern labor organization is for the employes, as distinguished from the employers. It is more expressive, therefore, to speak of

the organization of the employes. It is the organization of an economic class, composed of those without capital of their own, who serve, for fixed wages, that other class, the employers, who have more capital than they can personally utilize. The term "laborer," used in this connection, is misleading, as already stated, because it gives rise to the inference, which is false, that the employe is the only one who labors.

Labor in the Industrial Stage.—The economy of the modern nation in its relation to labor has certain fixed, distinguishing characteristics. One of them is the legal footing of employe and employer. They may move in different social circles, but the law recognizes no distinctions. In the previous economic stages, legislation has been so framed or so construed as to create or tend to create some legal inequality. Another characteristic is the freedom of movement accorded to the employe. Formerly he could rise only by meeting and overcoming various legal restrictions relating to the place of his employment or the nature of the occupation in which he might engage. In modern times, the employe of to-day may be the employer of to-morrow. It is a common occurrence for the employer to become the employe of his former servant. The ditch digger may become a lawyer. There is no legal bar in the way of a man's entering upon any occupation for which he has the requisite ability and will. Under the modern system the employe has freedom of contract as well as freedom of residence. The condition is illustrated by comparing it with that of the slave, the first of the laboring class, bound to his master; that of the serf, bound to the soil; the condition of the agricultural laborer of the middle ages, little better than that of serfdom, and the condition of the craftsman in the city stage, bound to pursue the particular craft of his gild, in the manner prescribed by the minute regulations of his gild and in the town were his gild membership located him.

Efficiency Grows with Freedom.—Following the progression of labor, from slavery to freedom, it is easy to see how much more efficient labor has become, with each advancing step. The man who is his own master feels that he is working for himself and not in the service of others.

The thought ennobles the work. He knows that if he is dissatisfied with one service he is free to enter another. If there is an overplus of labor in one locality, he is free to go to another. When one occupation becomes distasteful, he is free to choose and follow another. This state of affairs dates only a little back of the French Revolution. One does not realize the economic progress in relation to labor until it is seen what the condition of labor very recently was.

The Labor Question.—Notwithstanding the modern, ameliorated condition of labor, arising from the freedom of movement, the legal equality and the increased efficiency of labor, there is a "labor question." Like the poor, it is always with us. Legal equality does not seem to bring economic equality. It is true, as Professor Brentano says, that "the course of ideas since the eighteenth century has recognized the equal right of all social classes to a participation in civilization and its progress," but the employes complain that they do not participate equally with the employers. Of what good is the increased efficiency of our labor, they say, if we are kept from sharing in the increased results ?

Lasalle's Iron Law of Wages.—Ferdinand Lasalle was the leader of the Social Democrats of Germany from 1862 until his death in a duel in 1864. As a social agitator he schemed to better the condition of the working classes. There was then a school of English economists whose doctrine concerning the wages of labor was widely propagated. This doctrine taught that there was a natural and necessary rate of distribution of the product of labor and capital between the employer and the employe. In other words, it was maintained that there is a natural rate of wages which the employer cannot lower and the employe cannot raise. Following the English doctrine, Lasalle stated the rule determining the rate of wages in this way : "The limitation of the average wages of labor to the necessaries of life requisite among a people, according to custom, for the prolongation of the existence of the individual and for the perpetuation of the species—this is the iron and cruel law which controls the wages of labor under the relations of to-day." The very force which Lasalle threw into

the statement attracted attention, and his name came to be associated with the so-called law, although it did not originate with him. His use of the word "iron," furnished a convenient descriptive phrase.

The "Wage Fund" Theory, is an outgrowth of Lasalle's "Iron Law." It also involves a natural rate of wages. It assumes that there is a certain amount of money in every country which is available for the payment of labor. This amount is the "wage fund" of the country. Its size is determined by the amount of capital in circulation. As it is to be divided among all the employes in the country, the rate of distribution or the wages each will receive, depends upon their number. They cannot increase the fund, and the only way to increase the distribution or raise wages is by limiting the number of those dependent upon the division. The theories of the wage fund and Lasalle's law are not stated here as representing economic facts. As theories, they belong to the theoretical domain of economics, and it has been said that Descriptive Economics has very little to do with that domain. They are stated, however, to show what economists have thought and what the sequence of thought has been. Even exploded theories have a place in economic history.

The Growth of Organization.—The organization of the employes has grown to meet the growth of the organization of capital. When the time comes that a gigantic trust, like the Sugar Trust, for instance, brings the entire nation within the circle of its operations, the employes conclude that they must expand their organization accordingly. Modern labor organization, therefore, amalgamates local coalitions into district associations. Districts finally cover states, and state organizations have expanded into national organizations. The Knights of Labor have their stated National Assemblies. The Trades Unions are represented by the American Federation of Labor, which is an affiliated body, composed of the International, National and local Trade Unions, the Federal Labor Unions, State Federations, Central Labor Unions and Trades Assemblies of towns and cities. The parts of the Federation are not as closely united as with the Knights. Great combina-

tions of capital, employing a vast number of workmen, have tended to systemize the growth of labor organizations, and have also increased, or at least preserved, the coalition of the employes. Certain advantages of the organization of the separate crafts into unions or assemblies have been discovered. This form of organization is fast prevailing. The Knights of Labor have come to recognize it to a certain extent. The employes of large concerns frequently have an organization of their own number, affiliated to the Knights of Labor or the Federation of Labor. An organization or union of that character frequently accomplishes the most. The employes can unitedly communicate with the employer, and he is most likely to meet them half way because they represent his own employes, and outsiders do not appear to be dictating to him regarding the conduct of his business.

Coalitions of Employers began with the early organization of Trades Unions in England. At first they were designed to meet some local and momentary emergency—to oppose a local strike. When the Unions became permanently and perfectly organized associations, the employers' associations became more of a fixed institution. In the United States several industries have state organizations of the employers, and city organizations are very common. Among the well organized industries are the builders and the publishers. The object is mutual support in strikes, the regulation of wages, and the indemnification of members against loss from strikes. The employers' Trades Unions retaliate for strikes by inaugurating lock-outs, and so the feud goes on.

The Division of the Product.—The distribution between the employer and the employe of the product of the joint application of labor and capital, is the foundation of "the labor question." "Of the net product of the joint application of labor and capital, what proportion shall fall to labor and what to capital?" The question had its origin back in the stage of the municipal economy. When we left the craftsmen and their gilds they had succeeded in their struggle with the burghers or landholding citizen class, and had acquired equal municipal and industrial rights. About the time they ac-

quired such rights, a "progressive degeneration" commenced. The journeymen and the masters ceased to work side by side upon terms of equality. Capital assumed a new importance in industry and the masters began to form a class by themselves apart from the journeymen. There was speedily developed an employer class composed of the masters, and an employe class composed of the journeymen. According to some accounts the employer class was fully as arrogant and grasping as any employer class known since. The quarrel about the division of the product between employer and employe commenced then, and it has been waged ever since. This industrial age is full of the strife.

The Quarrel Illustrated.—Suppose the case of an employer, a man who has more capital than he can profitably utilize by his own labor, who embarks in a manufacturing enterprise. He requires a certain number of employes. If he is successful, the industry will yield some profitable returns. How shall the returns be divided between the employer and his employes? That is the question. The division is usually made in this way. After paying for his rent and allowing for interest on the capital invested, and after paying the wages of the employes, the balance is the employer's share or the profits of the business. But this division does not indicate the share of the employe in wages. The employe claims that he has been compelled to receive the lowest possible amount which will prolong life according to "the standard of living." As Lasalle put it: "From the proceeds of production so much is taken and distributed among laborers in the form of wages as is requisite for the perpetuation of life. The entire surplus of production —the proceeds of labor—falls to the employer," and the human condition of the laborer is "always to dance round under the lowest rim of the necessaries of life, customarily requisite in every age, to stand now a little above this, now a little below it."

The Employe's Share.—The employe claims that by rights he should receive something more than *customary* wages—something more than will provide the bare necessities of life and prolong existence according to custom or the standard of

living. In substance the claim of the employe is this: The employer should be allowed his rent, interest on the capital which he has invested, and as his profits a fair share of the balance for the risk of the business and his management and supervision. The rest should fall to the lot of the employe. This, in substance, is the subject of the quarrel between capital and labor. It is usually and popularly referred to as a question of wages, but to prove that the real question concerns the division of the profits, you have but to notice that in nine cases out of ten when a body of employes demands an increase of wages, the demand is backed up by a showing of the employer's profits. On the other hand, the employer invariably fortifies himself by showing that the profits of the business are not sufficient to warrant an increase of wages.

The Organization of the Employes.—Following close upon the degeneration of the gild system and the rise of the employer class composed of the master workmen, and the employe class composed of the journeymen, coalitions among employes became frequent. This was toward the close of the eighteenth century. *Customary* industrial regulations which had hitherto prevailed, and especially during the sway of the gild system, began to fall into disuse. The main object of the coalitions was to preserve the old rights in a legal way. The associations of the employes endeavored to obtain legal redress by petitioning parliament. A secondary object was to support fellow workmen during the many strikes of the period. The employers began to take steps to combat the coalitions of the employes and succeeded in getting parliament to enact a law against them. This solidified the employes and the result of the agitation was the organization of the English Trades Unions.

Development of the Unions.—At first the associations of the employes were ephemeral. The employes united for a temporary purpose and with the object of securing some specific local amelioration. As soon as they had accomplished their ends, the coalition ceased, only to be formed again when there was further use for them. By and by they became permanent organizations. They were merely local societies, including, at

first, all employes of an industry in a particular locality. The early organization was imperfect. Strikes were frequent and rarely successful. Gradually the unions began to be extended so as to include several places. The members of a union upon going to another place would establish a branch union there, until all the places of the country in which the respective industry was carried on, came within the pale of the organization, and there were very few industries in England which were not organized.

The Object of the Unions.—The English Trades Unions sought to maintain the interests of the various industries as a whole, and to care for the individual interests of the members. In this they resembled the old gilds, whose chief purpose was the preservation of the interests of each craft, and to care for the private interests of the separate craftsmen. They were a natural outgrowth of the gild system by which each craft was organized into its own gild.

Trades Unions in the United States.—When the idea of the organization of each industry by itself was transplanted in the United States, the purposes were enlarged. The purpose of the union included not only a care for the welfare of the whole industry and of the individual needs of each member, but there was a special aim to increase the rate of wages. This was sought to be gained, either by securing a raise in the wages, or by limiting the number of employes through the restriction of apprenticeship. The American Trades Unions, moreover, introduced some social features into their organization. It was sought to elevate the employe class socially and intellectually. Regulations respecting self-help were introduced.

The Knights of Labor.—This is a modern organization as compared with the Trades Union. It differs radically from the Trades Union in that it does not insist upon each craft being organized by itself. It admits to membership all who come within its definition of workingmen. The Trades Unions have been conservative as to old traditions, and have proceeded as though there were an inevitable fight between employer and employes with no prospect of peace. The theory upon which the Knights of Labor is based recognizes a joint interest of

capital and labor, with the hope of greater amelioration of the workingman's lot by the means of closer industrial union between the two forces.

Advantages of Organization.—An enumeration of the advantages of the organization of the employes, would be based on what it may do when properly directed, rather than on what it has done. Organization has often failed, and on the other hand, it has frequently produced the following results:

(1) On the theory that the employe has a commodity—labor—to sell, organization may enable him to make the sale on the same basis as other wares are sold.

(2) It may place him in as good a position to sell, because it enables him by mutual contributions to withhold his commodity from the market when there is no demand.

(3) Because it may enable him to regulate the supply of labor, by distributing the employes, and assisting them in procuring employment. The difficulty of procuring stated employment, increases with each succeeding economic stage, and organization must provide for the difficulty.

(4) It may raise wages by united demand, when the demand of a single individual would go unheeded.

(5) It may enable the employe to make a better contract with the employer than could be done single handed. The contract ceases to be individual and becomes collective.

(6) It may shorten the hours of labor.

(7) It may secure legislation in favor of the employe and in protection of his equal rights to "participate in the advantages of civilization." The Factory laws are instances of legislation procured through labor organizations.

(8) Organizations may act as relief societies, or as insurance associations, and distribute funds collected from the healthy, among the indigent and sick.

(9) Not least, united association can attract attention. It will be heard. It will bring the condition of the unfortunate —those who are born with lesser intellectual capacities perhaps, or still worse, have been burdened with vicious parentage—to the notice of the more fortunate, and it will keep the attention in its direction.

Evils of Organization.—The sense of might aroused by combination may sometimes lead to unwise and imprudent demands. Such demands would doubtless be more frequent were it not for the influence of public opinion, which quickly perceives when the demands of the labor organizations are just, and when they are unjust. An impolitic course is perhaps due more to the influence of unwise leadership, than to the desires of the rank and file, so that a fundamental evil lies in the danger of bad leadership, and it is often said that the greatest foe to the organization of labor, is the professional agitator, who imbues his comrades with a spirit of unrest, and abuses his authority by inciting strikes and boycotts which are not wanted by the great mass of employes. This evil can be readily studied in the United States by tracing the history of some of the craft organizations whose councils have been directed by prudent and conservative men, and comparing that history with the history of organizations which have fallen into the clutch of the professional agitator. Organizations sometimes handicap the individual members by imposing restrictions upon the conduct of industry, relating to wages, hours of work and the manner of working. The organization then reflects the vices which preceded the degeneration of the medieval gild system. The oppression of the workmen by the master under the gild system has been thus described by Yves Guyot: "Each gild formed a little feudal state, ruled by masters, who aimed and aimed successfully at making themselves an hereditary caste, and enforcing on every one not of their own order a host of almost impossible conditions as the price of entering it. Each master became a petty baron, to whom the workman was no better than a serf. Under the pretext of protection, the master exercised the most absolute despotism over the apprentices and journeymen. The unfortunate who aspired to the freedom of his craft, had first to serve a long apprenticeship to one master. The masters made the rules and in every gild they squeezed the very last farthing of profit out of the young workman. * * * Handed over powerless to his master, subject to all his requirements and all his caprices, the apprentice had no appeal. If driven by want and ill usage he ran away, no one

might offer him an asylum. Like a serf he could be treated as an article of commerce, and sold by one master to another."

The Union of Labor and Capital.—It is often said that the interests of capital and labor are identical. The interests of two hungry lions dining on a kid are identical. It is to the interest of each to get as large a mouthful as possible. There was a time when capital and labor were united. In the family stage of economics, each person was a joint owner in all the capital of the family and performed a share of all the family labor. There was a similar union in the village stage, although capital began to be felt. The laborers, those who served others, were mainly slaves or serfs, and there could be no division of interests. In the city stage capital began to assume a new importance. The master craftsmen were those who had acquired sufficient capital to buy the raw materials and manufacture for the general market and for a future demand. Then they became the employer of the journeyman without capital, and the interests of the two classes began to part. In this national stage, the importance of capital as compared with labor has become more marked. A very little capital, compared with modern standards, would enable the medieval craftsmen to become a master and set up for himself. In our times the possessor of a little capital has no chance in competition with great corporations and the modern modes of capitalistic production. In the language of Professor Ely: "As a separate, distinct and mighty force, capital as it exists to-day, is something new." Its interests can never be identical with those of labor under the present order. The employer will ever strive to appropriate as large a share of the joint product as possible, and the employe must ever strive to get his share.

Schemes for Lessening the Strife.—Many plans have been suggested or tried for uniting labor and capital. Some are visionary and some have worked practical results. Many of the projects aim to make the employe a capitalist. Some seek to introduce stated rules for the government of the relations between the employer and the employe.

(1.) *Labor Legislation.*—To the latter class belong the so-called labor laws. The State steps in by means of legislation

and seeks to regulate employment and control the relations of the employer and employe. Labor legislation, as such, began in Queen Elizabeth's time by the enactment of the Law of Apprentices. The gild system under which the industrial system of all Europe had been organized was undergoing a process of disintegration, and the labor question was becoming troublesome by reason of the rise of an employer class as distinguished from the employe class. The Law of Apprentices sought to codify and continue the regulations of the gild system. This legislation was followed up by the factory legislation which began at the opening of the present century. Arkwright's newly invented loom was revolutionizing the textile industry. Spinning in cottages and homes fell into disuse and the spinners began to be massed in large factories under the direct supervision of employers. The first factory law was designed to meet the resulting evils. Additional laws were framed from time to time looking to the regulation of the factory system connected with each industry. Finally a general law is enacted applicable to all large manufacturing establishments, and the special acts relating to particular industries, are repealed. Legislation becomes general instead of special. This process is illustrated in the growth of the factory legislation of many States of the union. The principle is still at work, and we must study its past workings and observe its future developments.

2. *Courts of Arbitration.*—This plan for settling the differences between employer and employe was first put into definite shape in Nottingham at about the time of the close of our civil war. A stocking manufacturer, named Mundella, was instrumental in introducing the system for the settlement of differences between employers and employes engaged in the stocking weaving and glove industry. The main feature of the plan was the institution of courts of arbitration consisting of nine employes chosen by the trades unions of the employes and nine employers chosen by a general assembly of the employers. All disputes must first be brought before a committee of reconciliation, consisting of four members of the court. If the committee could not make adjustment then the matter came before

the whole court for final decision. The system rested wholly upon the voluntary consent and agreement of the parties. Shortly after Mundella's "Rules of the Courts of Arbitration in the Stocking Weaving and Glove Industry of Nottingham" were formulated, another system was set up at Wolverhampton by Rupert Kettle, and developed into what is known as Kettle's Courts of Arbitration. They differed from Mundella's in that provision was made for the enforcement of the decision of the court. The agreement which the parties formed raised a legal obligation to obey the decision of the arbitrators and the court might in this way enforce execution of its sentences.

In the United States the various legislative enactments instituting boards of arbitration and mediation have been founded upon the English system of arbitration by agreement. The statutes impose in the courts compulsory power of investigation, without authority to execute sentences. The success of arbitration through legislation has been but little, if any, greater than that by agreement instituted by Mundella and Kettle.

Three steps may be traced then in the development of arbitration between employe and employer.

(a.) Submission to arbitration by voluntary agreement without power to enforce decision.

(b.) Submission to arbitration by voluntary agreement, with a legal obligation to abide by the decision of the court of arbitration.

(c.) Enforced arbitration or more properly investigation by courts or boards of arbitration instituted by statute, without power to enforce decision.

The fourth step is being agitated.. It is compulsory arbitration by legislation instituting boards or courts of arbitration, with power to compel either side to submit to investigation and to abide by the decision.

3. *Profit Sharing* between employer and employe is a third plan for lessing the strife. It has been tried both in Europe and the United States. It has sometimes worked marvelously well, and forthwith has been declared to be the panacea for the social-economic malady which we are now discussing. On the

other hand, it has sometimes failed, and failed dismally. In its more general form, the employe receives fixed wages and in addition a portion of the net profits of the business, distributed in proportion to the employe's salary. In other words, after paying his employes the wages agreed upon, and after deducting rent and interest on the capital invested, the employer is willing to distribute a part of the residue or profits among the employes. The joint industry is supposed to be bettered by the increased interest which the employe takes in the business. Machinery is better handled, and more carefully used, and duties are performed more faithfully. In some cases the profit sharing is effected by means of the joint stock company, the employes holding shares in the capital stock, and to that extent becoming capitalists, and in either case the employes are supposed to be directly interested in the results of their own labor, and therefore will make that labor as efficient as possible.

4. *Co-operation.* — Co-operation among employes has frequently been advanced as the scheme which would work industrial transformation and solve the labor question. Co-operation is either compulsory or voluntary. The joint stock company referred to in the preceding paragraph, is an instance of co-operation. The employes combine their capital and manage the joint industry in their own way, sharing the profit and loss according to the amount of capital which each has invested. In England and France, co-operation has been at times extremely successful. The system there frequently takes the form of co-operative societies for the purchase and distribution among the employes of the various wants of life. The co-operative store is a familiar example.

5. *Piece Work* does much toward avoiding disputes between employer and employe. It is an expression of free labor. The employe feels himself free. The employer furnishes him raw materials, tools and motive power, and the employe is at liberty to deliver the results of his work whenever he may choose. "Piece work maintains the distinction between the man and the thing; the human individual and the utility he produces. It specifies the function of the human who owes a fixed service

in return for a fixed price. Piece work is one of the progressive forms of organization of labor. In large undertakings it begins to be the substitute for other modes of labor wherever it can be applied."

6. *The Scale System.*—This is practically the payment of the employes according to the profits. It is best known by its application in the payment of the employes engaged in the iron industry in the United States. From the fact that it originated with the Amalgamated Association of Iron Workers, its best known form is the "amalgamated scale." As applied in the iron industry, the employes are paid according to the selling price of iron. This would work injustice, however, to manufacturers in districts less conveniently located with reference to transportation than others, because while the selling price of iron is fixed for the whole country, one manufacturer must sometimes pay more for transportation than another, and therefore make less profit. To meet this objection the iron producing territory is divided into districts, with reference to distance from, and cost of transportation to, tide water, for instance, and a uniform scale is agreed upon between the employers and employes of each district. The scale of the several districts is modulated to meet the several differences in cost of putting the iron on the market. In practice, the employers at different points are thus placed on an equal footing. The scale is fixed by agreement, at stated intervals, upon the basis of an assumed price of iron. If iron rises during the interval, the employes receive a proportionate advance in wages. If iron falls, they must submit to a proportionate reduction in wages. If each side would invariably present and accept a fair scale, the system must certainly be advantageous. When the stated intervals for "signing the scale" come around, however, there is frequently haggling about the ratio, resulting in an uncertainty injurious to both the employers and employes. Business is at a standstill, until the scale is signed. This system, like all others of its nature, involves, first of all, a question of education and ethics. The employer must be ready to accept a division that is fair, and the employe must understand when a fair division is offered, and not demand one that is unfair.

Socialism and Communism, are intimately connected with the subjects which have just been discussed. The advocates of socialism desire the perfect union of capital and labor, or in other words they seek the complete industrial union of the three factors, land, labor, capital. The English language is the usage of the best writers. So it may be said that the true theories of socialism are those proposed by the leaders of socialistic thought. If socialism were what every agitator proclaims it to be, systematic study of it would be wholly unprofitable. There have been various schools of socialistic thinkers, at various times, in various parts of the world. Their theories and plans have differed in respect to details, but there is a connecting thread through the whole. It will suffice our present purposes to follow that thread. It will not be necessary to speak of socialism and communism under separate heads. While a different meaning is still attached to those terms in some countries, they are frequently used synonymously in the United States. Communism is the elder term and socialism the newer. A still more recent term is collectivism. It is sanctioned by the best of recent writers. Our purpose being simply to observe the controlling ideas of the socialistic school, it will be unnecessary and impossible to trace the shades of thought which distinguish communism, socialism and collectivism in Europe.

What Socialism Means.—We must remember that we cannot be very exact when we attempt to sum up in a few paragraphs the substance of many volumes by many great thinkers. Language must be general. The simplest illustrations of the meaning of socialism will be the best for our purpose, and perhaps we can find that by going back to a stage in economics which we have passed. For instance, it has been stated that in the family stage of economics property is owned in common. The statement applies also to the economy of the primitive village community. The early village is an economic unit. Each member of the community labors in the common field. The harvests are gathered into a common storehouse whence they are parceled out to each family. In the enlarged households of partially agricultural tribes, there are communal

dwellings owned in common by the members of the household, like the long-houses of the Iroquois. Subsistence is in common. In all these instances there is perfect community of living and all property is collective. This community of living which characterizes the primitive economic stages forms the basis of socialism as advocated at the present day. It aims at collective ownership, by the community or state, of all property used in productive industry. Property is to be nationalized. It demands that all industry shall be carried on under the direction of the state. Free competition is to cease. There shall be neither a laboring class nor a capitalistic class. Every member of the community shall devote himself to some productive work and he shall receive in return, as the result of his own labor, according to some socialists, (1) a distribution of the profits in proportion to his needs. According to others there must be (2) a perfect equality of distribution without reference to needs, and without reference to merit of service of the individual. Still others advocate that each individual of the community is to be rewarded (3) according to the service which he renders the community. A fourth class say that distribution of the good things of life is to be (4) according to the capacity of each individual. The prime distinction between the various socialistic schools is founded on adherence or non-adherence to some one of these plans of distributing or sharing the products of the common labor.

Industrial Democracy, is the end of socialism. In itself industrial democracy has few objective features, but all who desire it are not socialists. Some believe that it may be attained by voluntary co-operation. In the state of industrial democracy there is to be a common ownership of the means of production under the common management, but with private ownership and enjoyment of income. To establish this industrial state, as it exists in theory, a far-reaching transformation must take place in the organization of society. Property must be transformed and pass from private ownership to public ownership. Industry must be transformed so that the state will command it, whatever the disposition of the individual members. The state loses its political character.

It becomes an economic organization, "analogous to the administrative council of a huge co-operative society embracing the entire country." Money as a medium of exchange will disappear because there will be no use for it. No man will be obliged to sell his labor or buy his wants, because the state will furnish him employment and look after his wants.

Beautiful in Theory.—As a theory, socialism has many attractive sides. It appears to be a perfect solution of the struggle for a living, and from that point of view, it is lovely to the eye of the shiftless and improvident. It would mean the abolition of all trusts and monopolies—monopolies of soil or monopolies of capital. It would prevent aggregation and concentration of wealth. There would be no impoverishment of the employe classes, because every man would be as rich as every other man, and the state would be the only employer. It would put an end to the irrepressible collision between capital and labor. It is, therefore, favored by philanthropists and humanitarians who have real, genuine sympathy for the less fortunate classes. Socialistic discussion is worthy of encouragement if for no other purpose than to draw attention to social reform and social problems.

Theory and Practice.—The theory of Socialism is one thing; the practice of it, including the plans by which society, as now constituted, is to be transformed, is quite a different thing. It is in regard to the practice—the putting into effect of socialistic theories—that the greatest diversity of opinion exists. Socialism looks well and reads well on paper, but the problem of carrying it into effect is still to be solved. It is more than likely that ages must elapse before it will be possible of practice, just as ages have been required for the evolution of the existing state of industrial society. Industrial democracy being the goal, the means by which it is hoped to be attained are two-fold. (1) Voluntary co-operation. (2) Coercive co-operation or socialism. The latter involves the use of the power of the state to compel co-operation and regulate industry. The manner of applying coercion and of using the State gives rise to various schools of socialism and shades of socialistic thought.

Other "Isms."—Socialism, as a theory, has rested under a cloud because of the various "isms" which have from time to time become connected with it. They are such as Anarchism, Materialism, Nihilism, Atheism, Free Love, and other schemes of both evil and well-meaning dreamers. Real socialism, as we have seen, is none of these.

Anarchism—Is important enough to deserve a word by itself. Socialism, in so far as it seeks the establishment of industrial democracy by peaceful and orderly means, is not morally blameworthy. It involves nothing contrary to justice and good morals. Anarchism, however, is morally blameworthy. It is bad in theory and worse in the plans by which it is sought to be put into effect. The socialists ask that all industries shall be pursued in common and under the management of the state. The anarchists demand that the state itself shall be abolished; that there shall be no government, but each individual shall exercise authority for himself. Anarchists deny the right of society to organize government which shall exercise authority over individuals. In place of government, they claim that each individual shall have the right to federate himself with others as he may see fit, and each federated community thereupon make its own laws according to its might.

CHAPTER III.

THE DIVISION OF EMPLOYMENTS.

The Growth of the Division.—The study of the economics of the family showed us that it concerns a stage of industrial society without division of employments. The members of the economic family do not divide up their work and each one devote himself to some particular kind of labor. Each man employs himself indiscriminately in gathering wild fruits, in hunting or fishing. Even the distinctions of sex rarely produce a division of labor. When the village community is developed, one man becomes a herdsman, another works a-field and another becomes a carpenter. The increased wants of life necessitate an increase in the means of satisfying them, and the time comes when a man cannot be a "jack of all trades." The result is that each man is set free to devote himself to a more limited number of pursuits. City economics produces a still more minute division of employments. The agriculturist is now set free to devote himself wholly to tillage, while the craftsman can give his undivided attention to working up raw materials into utensils and clothing.

The Present Division.—The development of the industrial stage of economics brings with it a corresponding development of division of employments. Every advance of industrial society sees a corresponding diversity of occupation. In this regard the growth of industrial society is likened to the growth of a tree which first puts out large main branches. They represent the simple employments of the village life. These branches sub-divide as occupations sub-divide, with the beginning of the city life. The full grown tree with its many shoots and twigs, is the division of employments in the national stage of economics. The process is like the growth of complexity in the structural organization of animals, ascending from the lower to the higher orders.

Incidental Duties becoming Occupations.—In the early stages of industrial organization there are many duties incident to every man's daily life. No one of these duties composes his occupation. They are all simply incidents. As wants increase with the advent of higher industrial organization, that which was an incidental duty becomes a livelihood. Many of the industries in which men now engage for stated employment were part of the domestic duties a few years ago, and were carried on in the household for the benefit of the family.

Divisions in Manufacturing.—The various manufacturing processes afford good illustrations of the progress in the division of employments. Let us take one of the most ordinary occupations, that of the shoemaker, for instance. The village shoemaker was both cobbler and shoemaker proper. His bundle of leather for repairs as well as for a complete shoe, came to him on the village stage coach. He took the raw product, cut it out and by slow manipulation turned it into a shoe. In this day there are hardly any shoemakers left. The shoemaker's shop has become simply a cobbler's shop. Men are now cobblers, cutters, vampers or lasters. They follow some one of the forty or fifty occupations connected with a modern shoe factory.

The Gain to Industrial Society.—There are many ways in which the division of employments works a real gain to industrial society. There is a saving in the amount of capital invested in tools. If all the shoes worn by the people of the United States were made after the practice of the village shoemaker, and each manufacturer had the full kit of tools with which he must be provided, a large portion of the capital invested would be lying idle much of the time. Each man could use only one of his tools at a time. One shoemaker's awl does not involve the investment of much capital, but the tens of thousands and even millions of awls that would be required, and which would be lying idle while their owners were cutting uppers or polishing, would mean a large amount of idle capital. There was a time when nearly every family possessed a buckskin needle, but most people now live and die without seeing one. The capital required by the family is just so much

less. Again, there is the increased efficiency of labor, by reason of the increased skill which a man acquires, when he devotes himself to a single occupation. The modern artisan accomplishes more and does better work than the artisan of the olden times, because he gives his attention to one class of work. Better and more costly tools and utensils of labor are possible, because they can always be in use and producing a revenue. The village smith cannot afford a great lathe, costing hundreds of dollars, because he has not steady work for it. Another important gain lies in the fact that, by reason of the multiplication of employments, men can find occupations suited to their natural aptitudes. Every man can find something for which he has a native bent, and in choosing his occupation he can take into account his physical characteristics. A keen sense of touch, of taste or of smell, may cause him to be peculiarly adapted to a particular occupation. There are gains in other ways than those enumerated. They are all summed up, however, by stating that the division of employments increases the efficiency of labor. The struggle of the day demands that each man shall make his labor as efficient as possible.

Disadvantages of the Division.—It tends to make men one-sided. It is apt to develop certain faculties at the expense of others. It produces ill-balanced minds, and we hear the complaint that there are so few "all-around" men, as they are termed—men who are versed in many arts and sciences. It takes what is called "life" out of an occupation. It renders a man's pursuits soul-less. The watchmaker who makes a whole watch takes interest in his work, because he observes progress in the construction and adaptation of the various parts. The mechanism becomes a thing of life and awakens his sympathies. On the other hand, the employe of a watch factory who makes a single part, such as wheels of one kind, day after day, is liable to beget a sluggish intellect. He becomes a mere machine.

The Dependence following the Division.—When employments become highly divided, and the various processes of production are apportioned into many forms of labor, men

increase their dependence upon each other correspondingly. When there are only half a dozen different employments, as in the primitive village community, there is but little interdependence. Economic dependence commences then, however, and it grows with each successive economic stage, until the time comes when every man places some reliance upon the labor of other men, for the satisfaction of his wants. In the modern shoe factory all the workers depend, first of all, upon the cutters, who take the hides and cut out the various parts of the shoe. The stitchers, the lasters and the finishers must perform their various parts. If one set fails, all hands must stop work. This dependence is slight compared with that which the whole body of operatives places upon those engaged in other departments of activity—upon the farmer who supplies them with meat and bread, the cloth manufacturer and tailor for a supply of clothing, and the trader who brings the produce of the farm and factory to where it is wanted. The farmer, in turn, must depend upon the workers in the shoe factory for his boots and shoes, and upon other artisans for the various utensils of husbandry. The town or city where one class of manufacturers predominates, must depend upon other towns and cities where other manufactures are produced. Village depends upon village, villages depend upon towns, towns upon cities, and cities upon the economic activity of the world at large. Each individual possesses a certain private economy which goes to make up the economy of the whole. Every man in the nation has his place. While this book is in preparation, the author, the publisher, the compositor, the proof-reader and the pressman, and indirectly many persons engaged in other occupations, must rely on the performance by other persons of their part in the organism of industrial society.

CHAPTER IV.

THE ECONOMICS OF POPULATION.

Malthusianism.—It was in the year of our Lord seventeen hundred and ninety-eight, just about a century ago, that Thomas A. Malthus, a clergyman of Surrey, published what he called, *An Essay On Population.* There was great discontent throughout the whole of Great Britain as well as on the Continent. Malthus began a study of politics and endeavored to find the causes of the discontent. He started out with the purpose of proving that the Governments of Europe, which were charged with the prevailing hard times, had nothing to do with it. He was endeavoring to find natural causes for the condition of things, beyond the power of the ruling classes to produce. The result of his study was the discovery of what he called the "law of population." In substance, his law is that population increases in a geometrical ratio, as 2, 4, 8, 16, 32, while the food supply increases only in an arithmetical ratio, as 2, 4, 6, 8, 10.

What if Malthus were Right?—If the theory which Malthus advanced concerning the growth of population were correct, the number of the people on the face of the earth would soon exceed the supply of food. In two centuries the population would be to the means of subsistence as 256 is to 9, and long before that time people would be starving to death. For instance, in the United States, the population doubles at least once in twenty-five years. If it continued to increase in a geometrical ratio, in two hundred and fifty years it would be more than sixty thousand millions. Professor Ely illustrates the increase in this way: "Let us suppose that there are only two people on the face of the earth and population doubles once in fifty years. At the expiration of three thousand years the whole surface of the earth, land and sea, would be covered with people piled one on top of the other eight hundred deep."

Increase of the Animal World.—We may have recourse to the animal world again for more emphatic, as well as for more interesting illustrations bearing upon this subject. Some of the lower forms of animals increase with startling rapidity, and were it not for the checks upon increase, the earth would be overrun with them. Men would stand but little chance of subsisting. A single Infusorian, for instance, may be the ancestor of millions within a week. It is said that the female of some species of the Aphis often produces one offspring per hour, for many days consecutively. At this rate, in a single season, a progeny would be produced which would "weigh down five hundred millions of stout men." A startling example of animal increase, is that of the cod fish. "The roe of a cod contains sometimes nearly ten millions of eggs, and supposing each of these produced a young fish which arrived at maturity, the whole sea would forthwith become a solid mass of closely packed cod fish." Only a small proportion of the progeny of the lower animals, however, attains maturity. The struggle of life with them, is such, that very few survive it. Their propagation has been likened to the fable of Mirza's Bridge—few get across. In the light of these facts the mistake which Malthus made is more evident. It is as though he had started out to picture the catastrophe which was about to ensue by the ocean becoming overstocked with cod-fish, basing his calculation upon the assumption that every egg produces a full grown fish.

The Downfall of Malthus.—Nearly a century having passed since Malthus announced his discovery, we ought to see some signs of this appalling increase of population, as compared with the means of subsistence. The fact that there are still no signs of it, proves that he was wrong. His law was no law. His deductions were incorrect. Population does not increase in the geometrical ratio. The growth of population as compared with the increase of the means of subsistence, is not as disproportionate as Malthus believed, and as a great many learned men of his day believed, when they read his essay.

Checks on Population.—Malthus' chief error consisted in failing to allow for the various checks on the growth of popu-

lation. He did not allow for positive checks like plagues, intemperance, crime and war. There may be localities where for short periods the population increases in the ratio proposed by Malthus. Sooner or later, however, these checks upon increase come into play. When the growth of population presses closely upon the means of subsistence, vice, disease and pestilence are more active and effective and the birth rate decreases. There are negative checks which Malthus may be excused for having overlooked at the time. It is now pretty well ascertained that as civilization advances and takes on a higher character and wants become more numerous and of a more costly nature, the growth of population is less rapid. In all departments of the world of life, increase becomes less, ascending from the lower structural organization to the higher. A grain of wheat multiplies at the rate of two-hundred fold annually. The rate of propagation in the vegetable is much greater than in the animal world. The lower forms of animal life propagate faster than the higher forms.

The Increase of Subsistence.—A little investigation will show that Malthus must have been wrong also in his statement of the increase of food supply. Instead of becoming less in proportion to the increase of population, it becomes greater. The food supply in the present or industrial stage of economics, is greater in proportion to population, and of a better quality, than ever before. The subject may be illustrated by comparing the condition of the inhabitants, of what is now the Empire State, at the landing of Columbus, with the condition of the present population of the same territory. That state never contained within its boundaries more than twenty-five thousand Indians. Existence, among them, was a desperate struggle for the necessary wants. Hunger was almost a daily sensation. Famines came with regularity and starvation stared them in the face for a large portion of the year. Where twenty-five thousand of them, or, one to every one hundred and twenty-one acres, were engaged in a constant search for food,—over-feeding when game was abundant and when the corn was ripe, starving when the game was scarce and the corn was gone,—six millions of people, or about one to every five acres, live in peace and plenty.

Food and Civilization.—The rule for New York is good the world over. As civilization advances and population increases, subsistence becomes more certain and more adequate to meet the wants of the population. In the early stages of economics when men have little command over the forces of nature, the sources of subsistence are limited accordingly. As population increases and begins to press upon the means of subsistence, men begin to overcome natural forces and increase the sources of food supply. They first add wild game to the frugiferous subsistence. Then they introduce animal domestication. Next they cultivate the farinaceous plants. In the present stage of economics, when all the factors in production, agriculture, commerce and manufactures, go hand in hand, the possibilities of food resources are almost incalculable. The evolution of industrial society is accompanied by evolution of food supply—food of a more varied character and better quality.

Efficiency of Labor.—One of the causes of the increase of subsistence, is the increasing efficiency of labor, ascending from the lower of the industrial stages to the higher. The labor of a single inhabitant of the Empire State is more productive than the labor of ten Senecas. Agriculture is more productive and agricultural labor more efficient. Modern machinery and mechanical appliances frequently enable one man to accomplish more than scores of men could accomplish in the age of Malthus. The forces of steam and electricity have revolutionized the ways of getting a living. Malthus would not have promulgated his law of population had he dreamed of the "broom stick train."

The More the Better.—We have wholly lost the significance of descriptive economics, if we have not, by this time, discovered that the greater the number of people inhabitating a territory and uniting their industries, the greater will be their mastery over nature, and the greater will be the number of the good things of life which they will possess. "Progress and poverty" is false in name and false in fact. Economics has yet to teach us that there has been anything but progress from poverty and barbarism to wealth and civilization.

The Power of Nature Limited.—While it is true that the growth of population has, in our time, been attended with an amelioration of the material welfare of the race, because of the increased means of satisfying wants through the enlargement of the productive powers of nature, there must be recognition of the fact that nature's powers are limited. There must of necessity be a limit. The time must come when the earth shall have been utilized to its utmost capacity; when the fields, the forest and the mine can do no better. A point will be reached in tillage, when an increased application of labor and capital will not result in a corresponding increase of product. In other words, there is a limit to the profitable expenditure of labor and capital. This is called the law of diminishing returns. It assumes that intensive agriculture will not be profitable after a certain point, and when that point is reached, increased energy applied to cultivation will not support a corresponding increase of population. The rule holds good as to all industries directly connected with the production of commodities designed for the satisfaction of material wants, from natural sources. Thus the silver miners of Montana find that there is a limit to the depth which they can delve in the earth and profitably bring forth silver ore. Lumbermen have utilized great labor saving conveniences, so that, although the forests have become thin and scattered, yet they have been able to manufacture lumber so much more cheaply than our forefathers, as to continue to manufacture it at a profit. They find, however, that the time comes when the timber becomes so sparse and scattered that even the very best methods of making lumber will not enable them to do it profitably.

Not Worth Our Worry.—While all these things are true enough, it is scarcely worth while for us to worry about the approach of the time when the earth can support no greater population. When we are told that if it were not for the law of diminishing returns, thousands of millions of men might live in the United States as comfortably as tens of millions, it is an economic fact of which we recognize the truth, but it need not give us great concern. It is doubtful whether any country, even the most densely populated part of Asia, has

yet utilized all its natural capacities so that it cannot profitably produce more and support a larger population. If China should proceed to practice the economics of the United States, to adopt all our labor saving appliances, and make labor as effective and productive as with us, there is no telling the extent to which her population might increase without starvation ensuing. The saying is that "a franc's worth of coal does the work of a laborer for twenty days." We use coal but China does not. We make our labor twenty times as productive as labor in China. Therefore, poor land, the barren hill-side, can be profitably tilled, marsh lands can be drained and the productive area enlarged. In these ways the point of diminishing returns seems to be set back a thousand years by the inventions of a single year. We certainly need not worry over the prospect of starvation for the race until a large portion of the earth's surface has reached the point of diminishing returns. The youngest reader of this book will barely see the great, prolific, central table land of Africa fairly well populated, and its resources fairly developed. That table land has the soil, climate and natural resources capable of supporting millions of people in health and comfort. There are other portions of the earth's surface which must yet be brought beneath the husbandman's sway. When a beginning has been made toward the reduction of these unoccupied, fertile spots of earth, to a productive state, then we may commence to feel discomfort, because the world may sometime be unable to support her inhabitants.

CHAPTER V.

GROWTH OF THE INDUSTRIAL REVOLUTION.

Its Historical Meaning.—The term, industrial revolution, is frequently applied to certain economic changes which took place at the close of the middle ages. Medieval *customary* regulations which had previously controlled industry gave place to modern regulations. Free competition took the place of custom. From the point of view of descriptive economics, however, it is preferable to consider that there has always been an industrial revolution; that it commenced with the invention of the fishhook and the bow and arrow, and has continued with the spinning-jenny, the cotton-gin and the telegraph. According to this view the industrial revolution is the continual progress of mankind through discoveries and inventions. This progress has not always been uniform. Certain periods can be pointed out when advancement has been particularly marked and there are other periods when the progress has been hardly appreciable.

Progress Intermittent.—A few inventions or changes in economic methods, which are in themselves very important, are sometimes pointed out by economists as the accompaniments of the industrial revolution. Such suggestions derive force from the fact, already referred to, that progress through inventions and discoveries is by great leaps. Each leap includes a period of considerable duration. After each leap there is a period of rest.

The Seen and the Unseen.—Some discoveries appear to us to have played an important part in the industrial revolution, because we can see and directly measure their results. In other instances the results are not seen because they are indirect. For instance, the discovery of the uses of steam will be set down as one of the inventions producing great amelioration in the material condition of man. We can see the results.

The same suggestions may be made regarding the invention of the fishhook. We see and understand how the lot of the primitive fisherman was bettered by its discovery. The Fuegians still fish with the bait tied to the end of a string and depend for success upon dexterity in landing the fish before it can disgorge the bait. We can see how much better would be their condition had they good fishing appliances. We do not see how electric street cars facilitate our getting a living. We observe that they are great conveniences, but we cannot sit down and compute their industrial utility. We do not see how they enable us to save time; to get to our work quicker; to have more hours for recreation; how they set us free for other activities.

The Modern Industrial Revolution.—What is the character of the industrial revolution of this industrial stage of economics? The subject of this chapter cannot be dismissed without some reference to the far-reaching changes in methods of getting a living which have taken place in recent times.

The Revolution in Farming.—We are accustomed to connect improvements in agriculture with better and more scientific methods of tillage, with more intensive and less extensive farming. These subjects suggest only one phase of the revolution. Another phase relates to the improvement of the domestic animals. It was only about a century ago that the Southdown weighed forty pounds or less and sheared two or three pounds of woolly hair. To-day it weighs three or four times as much and shears from six to ten pounds of pure wool. Similar improvement has taken place in the stock of cattle and horses. All the domestic animals receive better care and are correspondingly more profitable. A considerable portion of the revenue of the average American farmer comes from his stock raising, and this fact gives significance to the industrial revolution in agricultural life. American agriculture, it is said, is about to experience a further revolution. What the transformation will be is yet uncertain. Some say that farms will be sub-divided and will consist of small holdings, highly cultivated. There is no doubt that the average farm is not cultivated to the best advantage. Many a farmer would be

better off if he would abandon one-half of his farm, decrease the outlay for improvements accordingly, and work the other half intensively. Another class of writers express the opinion that the farming of the future will be on a large scale. Small farms will be merged into large farms, conducted with large capital upon systematic business lines, just as great corporations conduct great manufacturing industries.

The Revolution in Manufacturing.—Man has acquired such control over natural forces, that one man's labor will accomplish fifty per cent. in many cases, and frequently seventy or eighty per cent., more, in a given time, with less effort than ever before. Our daily bread is turned out by machinery. It is estimated that the labor of every three bakers annually turns into loaves one thousand barrels of flour. Adam Smith tells what evidently appeared to him to be a marvelous story. It is to the effect that ten persons, by the use of mechanical appliances used in his time, could make forty-eight thousand pins a day. The story did appear a little marvelous comparing the number of pins with the output of ten workmen, each hammering out pin after pin, from a piece of wire on an anvil. Three men, however, can make seven million five hundred thousand pins to-day, and make them much better than they could be made in Adam Smith's time.

Credit Economy.—Commerce and industry have been revolutionized by the credit system. It is the day of credit economy rather than of money economy. By means of the banks and the banking system, vast commercial enterprises are transacted without the actual transfer of any money. The function of the bank is no longer that of money keeper and changer. It is to buy and sell instruments of credit. It is said that in large cities the average bank handles over forty dollars in checks, drafts, and other instruments of credit to one dollar in actual money. Bank notes, and "greenbacks" are instruments of credit. They are simply promises to pay by the bank issuing them, or by the government as the case may be.

Commercial Credit.—This represents the principal phase of the existing credit economy. A manufacturer of shoes, we

will say, buys his hides of the leather merchant on sixty or ninety days credit. Before the credit period expires he is able to make the leather into shoes and sell them. He takes the cash received and pays on account to the leather merchant. But he has been obliged to give credit on the sale of many of his shoes. He may satisfy the leather merchant by giving notes, or notes of his customers, for the balance, and thus both the manufacturer and the dealer become parties to the credit transaction. The leather merchant may have procured credit of the tanner and the tanner of the dealer in raw hides. It is hard to trace the transaction back to the original creditor. They all owe more than the cash on hand will pay. The original creditor may be the stock raiser, but he may have borrowed from the bank until he can realize cash from the sale of his cattle. Perhaps the manufacturer gave the leather merchant a note in the first instance. The leather merchant discounts it and uses the proceeds and the bank is the creditor. In this way either of the parties to the transaction is able to transact an enormous volume of business as compared with the amount of capital invested.

Summing up the Industrial Revolution.—The struggle of man with nature has practically ceased. Now and then she is able to inflict a little hardship upon him, but it is only local and it furthermore is only temporary. Too much rain or too little rain may cause a failure of crops over a considerable area, yet there is no famine as of old. Communication and transportation are such that a sufficient supply comes from where there is a surplus. For instance, we cannot think of a famine in any part of the United States. The idea itself is incomprehensible. Agricultural, commercial and manufacturing industry are so closely united, there is such widespread co-operation between the factors of the economy of the modern nation that we are prone to consider nature as utterly routed. There is much to be accomplished, however. There is a wide field for the industrial revolution. We should expect that it will progress as in the past, and produce still better economic methods. Of the many great inventions which are in process of development, any one may be selected to illustrate the economic changes to

be effected. Marine telegraphy, for instance, would revolutionize navigation. Vessels at sea being able to communicate with each other or with points on land, the perils of the sea would be minimized. Ocean travel would become almost as safe as travel on land. A disabled ship could send out its warning signals and an ocean ambulance hurry to its aid. Marine insurance rates would be lower. The risks of loss being less, more money would be invested and more ships built. Marine freight and passsenger rates would be cheaper.

CHAPTER VI.

THE MONEY OF THE NATION.

Introductory.—At the beginning of the study of this important branch of economics, it will be well to have clearly in mind some of the first principles relating to the money of a nation. Popular conceptions of money and coinage are apt to be foggy. There are many errors current. Some of them are due to the tricks of the politician's trade. For instance, you may have heard in political harangues the declaration that money is worth nothing in itself; that it is simply the seal of the government which makes the dollar worth a dollar. Some of the things of which we must have a clear conception may be enumerated as follows:

(1) Money has four functions: It is a measure of value; a medium of exchange; a standard of value, and a store of value.

(2) It is a commodity, an article of commerce, capable of being bartered and exchanged like other commodities.

(3) It is a product of labor, and is worth the amount of labor necessary to produce it, that is to mine it, smelt and mint it into the shape of the desired coin. It costs a dollar's worth of labor to get a dollar's worth of gold out of the earth, and coin it into the shape of the dollar. The amount of labor determines the degree of value.

(4) It has general acceptability, or as is sometimes said utility. This utility furnishes a basis for value. The utility of the precious metals, however, for the purposes of money, is conditioned by the fact that they cannot be obtained without labor.

(5) Gold is not wealth any more than potatoes or corn. It simply facilitates exchanges, and for that purpose is more suitable and convenient than potatoes or corn. When it is coming into the country by every steamer from Europe, it does not follow that the country is becoming wealthier. When it is

going out there is no call for mourning on the ground that the country is becoming so much poorer.

The Amount of Money Needed.—Economic writers frequently devote much space to a discussion of the question. How much money does a nation need? The answers which have been given have varied according to the economic stage at which they were formulated. The answers have varied also according as those who have attempted them have kept in view the elementary principles of finance stated in the preceding paragraph. It is true that this question is somewhat perplexing. Perhaps we shall best study it by observing some of the answers.

The More the Better.—This is a common answer. People are prone to think that money is the measure of wealth, because it will procure all the material good things which they want. It naturally occurs to us that the more a nation has of it, the more prosperous the nation will be. The argument runs further, that money is a tool of trade; that it is a part of every individual's capital and of every nation's capital, just as the tools of a carpenter are a part of his capital, and therefore, the more money a nation has, the more capital it will have, and the better off it will be. In this connection, it is interesting to observe some of the comparisons which have been made by different writers, at various periods of economic history, to illustrate the place of money in the economic activity of a nation. It has been compared to a large wheel by means of which a due share of the means of subsistence and of enjoyment is distributed to each member of society. It has been compared to the streets and roads by which commerce is possible and is carried on. Another comparison likens it to oil which greases the wheels of circulation. Again, money is said to be to commerce what railways are to locomotion—a contrivance to diminish friction. Still another writer holds that money bears the same relation to other commodities that the written language of a people's literature bears to their dialects.

The Amount of Money is Immaterial.—Another view of the matter holds that it makes no difference how much money a nation has. In other words, it is wholly immaterial how

much gold and silver there is in the world. It is a matter of no consequence so far as the welfare of nations is concerned. Those who hold this view reason that because gold is a commodity, when it is more abundant than other commodities, its value will simply be less than other commodities and the price of other commodities will rise. When it is scarce prices will fall. An abundance of money will not enable a man to procure a greater quantity of the means of subsistence in exchange for his labor, nor will a scarcity of money lessen the quantity which he can procure for the same amount of labor. Therefore, it is immaterial to him whether prices are high or low. If money is abundant then in proportion as the prices of other commodities rise, he has more money to use in making purchases. It would be said for instance, that the fact that boots were one hundred dollars a pair in the Confederate states during the civil war was of no great consequence to a citizen of one of those states, because his pockets were overflowing with Confederate scrip.

The Amount Depends upon Economic Conditions.— This is a third view of the question. Those who accept it say that it is nonsense to give a general answer to the question, one that will be applicable to all nations at all times; that it is folly to try to figure out the exact amount of money, in dollars and cents, which a nation ought to have for each inhabitant. They say that the amount of money which a nation needs will vary according to the volume of its commerce, according to the rapidity of the circulation of goods and money; in a word, according to the economic stage in which the nation happens to be. If a nation has little trade it will need only a few instruments of trade, and but little money will be required to effect exchanges. On the other hand, if commerce is large, exchanges frequent and of large amount, there must be money enough to meet the necessities of the case. According to this view, if the economy of the nation is developing, the volume of its money must grow and keep pace with its economic growth. It is a matter of history that the money of modern nations constantly tends to augment. A village community, living in the stage of village economics, has little use for money

and in the primitive village community, as a matter of fact, there is no money at all. Exchanges are made by bartering, not through the medium of money. When villages have grown out of the stage of village economics, and developed a municipal economy, with the various economic classes, with manufactures and commerce, the volume of money must increase accordingly. When the cities become part of a nation and the national stage of economics is reached, the amount of money must again be increased, because all exchanges are now made through the medium of money. Wages are paid in money. Domestic servants instead of receiving provisions or other commodities for their service, now receive money payments. If piece work is common instead of monthly service, payments are necessarily more frequent, and more money is required. In other words it is a change from the barter economy of the Middle Ages, to the money economy of modern times; from the feudal system to the commercial system. Rapidity of circulation also, affects the amount of money a nation requires. For instance, the trade between Europe and the United States does not depend wholly upon the number of ships engaged in the trade, but also upon the number of trips which they make. If one dollar circulates ten times a year, it is as good as ten dollars circulating once a year. The presence of law and order in the nation, or the legal security of capital and private property, will affect circulation. Rapidity of circulation is also affected by a lack of security and confidence, tending to cause money to be buried or hoarded.

Credit Economy as a Factor.—It has just been said that, in the natural order of things, the amount of money which a nation requires increases with its economic growth, and that the nation needs more money, per capita, than the village. While economic history shows this to be true, yet we now come to a point where it is necessary to limit the statement. In the last chapter there was a discussion of modern credit economy, showing how commercial transactions are carried on without the use of money. Bearing in mind the statements then made, we see that a nation practicing credit economy on a large scale requires much less money than a nation which does not use the

credit system. Among modern nations, therefore, the volume of money does not always augment so as to correspond to the economic growth. The amount, to be sure, does increase and should increase, yet by reason of the practice of credit economy, the increase is not in a ratio corresponding to economic growth. In Great Britain, the Bank of England is the banker of all the other banks. It is their common clearing house, where debits and credits are offset. Checks and drafts from all parts of the United Kingdom are set off against each other. These checks and drafts take the place of actual money in commercial transactions, and the volume of money needed is so much the less. If the people of the United States, for instance, could all use a single bank, very little money would be required for circulation. It is estimated that nine-tenths of the payments of Great Britain are effected without the aid of money. Checks and bills of exchange, which are employed instead of money, are sometimes erroneously classed as paper money. They are not paper money, but rather money-paper.

The Amount of Money Self-Regulating.—As trade increases and more sales are made, and more money is needed with which to make payments, the required amount seems to find its way into the nation and into circulation. The demands of trade cause it to flow and reflow to meet trade exigencies. When gold is exported from the United States there is apt to be popular mourning for the wealth that is said to be flying away from us. When it is being imported there is great popular elation. People would not give much attention to the question if they did not entertain the erroneous idea that gold is wealth in a sense in which corn is not wealth. When gold is coming into the country, it is said that the balance of trade is in our favor; in other words, that we are selling more goods abroad than we are buying there, and the gold is coming to pay the difference. If there is any reasonable excuse for gladness because gold is being imported, it is because of the favorable balance of trade. This presupposes, however, that one of the conditions of national prosperity is a favorable balance of trade. When we come to discuss the balance of trade theory, however, we shall see that wise men hold it to be no great

thing, after all, for a nation to have a favorable balance of trade; that while it is desirable, other things being equal, it is not the one thing which ensures national prosperity.

Money for Wages.—A new criterion of the amount of money required by a nation has recently been set up. It does not pretend to be the crucial test, but simply one of the matters to be taken into consideration. It is to the effect that there should be money enough for the payment of wages by the day. In other words, "the day's labor of an ordinary laborer should not be inferior to the value of a piece of legal tender coin which could be conveniently carried. We need, then, enough money, so that the value of a coin of convenient size should not exceed a day's wages of an unskilled laborer." The whole subject concerning the amount of the money of the nation may, therefore, be summed up in this way: a nation wants as much money as it has use for, and no more.

Paper Money.—Up to this point in the chapter we may have had paper money in mind as often as we have had coin in mind. Let us have a clear conception of the character of paper money. In the first place, it is not money, but the representative or symbol of money. It is sometimes called token money. We call it money, and it passes from hand to hand as money, because it will buy our wants just as much as gold and silver. Let us illustrate its use. The Carthagenians had a leather money made in this way: They took any object, either of wood or metal, the size of the coin which they proposed to represent, enclosed it in a little leather sack or bag, and stamped the leather with the great seal of the state. The object inside of the leather might be a real piece of gold or silver, or it might be a bit of iron or copper. No one could tell. On the outside, however, it was stamped as though it contained a coin of a specific denomination. This leather money circulated from hand to hand as readily as the real money so long as the people had confidence in the state.

Promises to Pay.—If you take out your purse now and examine your paper money, you find that most of it consists of promises to pay. The national bank notes are promises to pay, (1,) by the banks which issue them, (2,) the num-

ber of dollars expressed upon their face, (3,) upon demand. In the case of "greenbacks," you find that they are promises to pay on the part of the government. Promises to pay what? They are promises to pay money, the real money which they represent. On the treasury notes there is a promise by the government to pay the bearer so many dollars in coin. If you happen to have a silver certificate, you will find that to be more truly a representative of money, than any of the other bills. The certificate represents so many dollars in coin on deposit in the Treasury at Washington, and the holder of it is entitled to go there at any time, present the certificate and get the coin money.

The Element of Confidence.—We naturally want to know how it comes that this paper money, which is not money at all, but merely a promise to pay money, comes to circulate as money. In the first place it is because we have confidence in the government. We believe that the government will keep its promises to pay. In other words, the money is redeemable in coin. In the case of the national bank notes we find, moreover, on the face of the note a statement that the payment of the note is secured by United States bonds deposited with the Treasurer of the United States. We have confidence that the government will make each bank keep on deposit sufficient bonds to redeem its various notes which have been issued and put in circulation. When we get a note of this kind we do not take it to the bank where it is payable, as we would a promissory note of an individual, for payment, but we pass it over to a creditor, and so it passes on from hand to hand as long as people are satisfied that the real money would be forthcoming if the bills were presented. If doubt arises whether the promise to pay will be kept, then people are loth to take the paper money. If they do take it, they take it at a discount sufficient to offset the risk of its being paid. When this occurs paper money is said to be at a discount, and coin at a premium.

The Creation of Government.—The fact that paper money answers all the purposes of money, frequently leads people to believe that money is the creation of government, and that the government can make as much money as it desires

and put it in circulation. It is a common and popular error. The fact is the government can not create money any more than it can create corn and potatoes. Suppose Congress should enact a law like this: "It is hereby enacted that there shall be 5,000 bushels of corn for the uses of government and of the people," would that produce the corn? No. If the government wants corn it must raise it by hiring laborers and tilling land, just as a farmer must raise it. Government can order that gold and silver shall be fashioned into pieces of specific weight and fineness and of specific proportions, and it can, if it chooses, issue paper promises to pay, representing this real money. That, however, is the extent of its power. The answer to the fallacy is a repetition of what has already been said, to wit: the value of money, the value of a gold dollar, is determined just as we determine the value of a pair of boots, or of a bushel of potatoes—it is worth the labor expended in its production. The government may say how many pounds shall constitute a bushel of potatoes. It may say how many grains of gold or silver shall go into a dollar. It cannot create the value of these grains of gold and silver. In the early days of California, gold dust was the common form of money. Every merchant had a pair of scales and weighed out for his customers the requisite gold dust in payment of purchases. Government saves us the trouble of weighing. It coins the gold dust into ingots of certain weight and fineness. The Government stamp is simply a guaranty of the weight and purity of each piece. The stamp adds nothing to the worth of the piece.

Advantages of Paper Money.—Paper money is of great convenience in commercial transactions. It is lighter than coin. A man can carry more in his pocket. The precious metals are subject to wear by use. They lose in weight and that is a permanent loss. Paper money can be sent by mail or transported by express more cheaply than the precious metals. To do business without paper money would be like trying to do business without the instruments of credit like checks and bills of exchange.

Disadvantages and Dangers of Paper Money.—The

precious metals are actually worth in other commodities what it costs to produce them. Two dollars can always be exchanged for an umbrella which has cost two dollars worth of labor, but a two-dollar bill does not by any means constitute two dollars' worth of labor. The plate having once been made, thousands of dollars can be printed off at the cost of operating the printing press, until the issue is many times greater than the cost of the labor from beginning to end. The danger, is, therefore, that too much will be printed. It can be made so cheaply that government is sometimes induced to lend a willing ear to the popular cry for "cheap" money. The result is inflation. The paper money falls below par. It passes from hand to hand only at a discount and can not be exchanged on even terms for real money. Citizens lose faith in it, and it soon drives out the real money. Foreigners will not take it because it is not at par with the precious metals, and foreign commerce soon feels the result. It drives out the precious metals because creditors in paying their debts will always pick out the cheapest money to pay with, provided debtors can be made, or are compelled by law, to receive it. In Persia once, there was a law that whoever refused to receive the paper money of the country was punishable with death. In other words, the government printed the paper and forced it into circulation. It was a "forced loan." When wampum was current money in New England, a cheap grade of poor workmanship appeared. Wampum coinage was debased. Massachusetts Bay Colony had to enact a law establishing the grade and fixing the value of the different grades. When the Connecticut farmers could, according to law, pay their taxes in cows, they always picked out the poorest of the herd and the legislature had to enact a law that no "lank kine should be received for taxes." These things illustrate Gresham's law which is stated a little farther on.

The Volume of the Currency.—Having admitted that paper money is a good thing and that it facilitates commerce, we must admit that its use is proper. The question then arises, however, how much of it should be printed and issued? How much will circulate, and how great an issue should the government authorize? It is a more difficult question even

than the question relating to the volume of money needed by a nation. The question is: How much paper money can be safely printed? These answers have been proposed:

(1) Not more than can be redeemed in coin at any time on demand. Redeemable paper money is good. Irredeemable paper money is bad and brings disaster.

(2) The amount which can be printed may depend somewhat on the amount of the government revenues. Laws authorizing the issue of paper money frequently provide that it shall be good in payment of government dues, and such payment is as good as though made in coin. The greater the gross revenues of government, therefore, the greater the amount of paper money which can be kept in circulation.

(3) The amount which can be printed will depend always on the amount of the reserve coin which is kept ready to redeem the paper. This involves the element of confidence which we have already discussed. Paper money will circulate in proportion as the people have confidence in its redemption upon demand.

(4) Finally, to repeat substantially what was said under the discussion of a nation's need of money, no more paper money can be safely printed than the country has use for, considering the state of foreign and domestic commerce. Whatever amount is required to facilitate exchanges, large and small, and will be absorbed in trade, may be safely printed.

Fluctuation of the Currency.—When too much paper money is printed, more than will circulate without discount and more than is wanted, it is inflation of the currency. The volume is arbitrarily and unnaturally inflated. Contraction is the opposite of inflation. In the case of contraction of the currency, there is too little to meet the demands of trade. In practice, the terms inflation and contraction are applied to the arbitrary action of the government in issuing or withdrawing paper money from circulation. Both are equally bad. The economics of a nation can not be suddenly changed in this direction. Economic habits are not formed by arbitrary laws. They grow. When a people have become accustomed to transacting their affairs in certain channels and upon a cer-

tain basis, a sudden change is apt to be disastrous. When for years a bushel of wheat has been worth about a dollar, and subject to rise and fall in price only as the crop is large or small, the over-issue or inflation of the currency, making wheat worth two dollars a bushel, disturbs the economic life. Neither the buyers nor sellers can suddenly adapt themselves to the change. Moreover, under our present system of credit economy, obligations and debts are contracted to be paid at future times. Inflation and contraction disturbs the nature of these obligations. Creditors demand that a debt to be paid them in three months shall be paid in money that will buy as much wheat as at the time the debt is contracted. They must know that bonds, mortgages and promissory notes will be of the same exchangeable value at maturity as at the time they are received.

Convertible Bank Notes.—The paper money thus far referred to is that known as convertible. It is convertible into coin. It is "redeemable," because it must be redeemed in coin upon demand by the holder. It represents coin, and we call it the representative of money. Token money is the phrase sometimes used. It can be converted into coin at the pleasure of the holder, that is, on demand. In order that it may be perfectly clear that bank notes are not money, let us illustrate further. You have a house and lot. It has value in exchange. You can exchange it for other commodities, for flour, for horses, for stocks. But you have also a deed of the house and lot. You cannot exchange the deed for other commodities. In exchange for provisions, it is worth no more than the paper upon which it is written, unless it carries the house and lot with it. It is the house and lot which has value, not the deed. A story is told of an Irish banker who was very unpopular with the people. A riotous mob gathered together all of the bank notes issued by his bank which could be secured. The mob thought it a fine time to ruin the banker. A bonfire was made and the bank notes went up in smoke. The people danced gleefully about the fire, because, in their minds, it betokened the banker's ruin. Instead of ruining him, they were doing him the greatest possible service. They de-

stroyed not his money, but his promises to pay. They put it out of the power of the holders of his bank notes to demand money from him.

The one Function of Paper Money.—Paper money performs only one function of money. It acts as a medium of exchange, and that is all. It is not a measure of value, or a standard of value, or a store of value. It performs only one of the four functions of money.

Inconvertible Paper Money.—A distinction is to be drawn between the convertible paper money which we have been studying, and another class of paper money which is inconvertible. That is, it is not convertible into coin, nor does any one promise to redeem it in coin. Convertible paper money may be issued by bankers or by government. The term "bank note" is frequently applied indiscriminately, to both bank money and government money. It is a loose way of speaking. Bank notes are paper money issued by banks. Paper money issued by government is composed of government notes. We must make the distinction now in order to distinguish convertible and inconvertible money. Inconvertible money is issued by government only. It would not be possible for bankers to get into circulation their individual notes, which are not promises to pay money on demand. Governments can do this to a limited extent. Even the government can not get the people to take and use as money, more than a very limited quantity of its promises to pay which name no day of payment, and do not promise to pay money. They can not be collected by suit at law, and are payable simply at the will of government. Such currency is usually issued only under the stress of war, or to meet sudden financial embarassments, when the ordinary revenues are insufficient and money can not be raised quickly enough by the usual methods. Inconvertible notes are debts contracted on the understanding that they are to be settled when the nation's finances will permit. Confidence that the government will at some time pay its debts, is the only basis for their value. When that confidence is lacking they will not circulate at all. Inconvertible notes are "pure credit" money.

Who Should Issue Paper Money.—There are two sides to

this question. On one hand it is claimed that only the government should issue paper money. On the other hand it is said that private bankers should be allowed to issue it subject to the control and regulation of government. It was just said that government only can issue inconvertible notes. In the United States both government and the national banks issue convertible notes. The banks are subject to the control of government, however, and are regulated, so far as their right to issue money goes, by national laws. The government is, to a certain extent, sponsor for their notes, by compelling them to buy government bonds to secure the notes which they issue. Everyone agrees that whoever may issue paper money, it should be issued so as to best secure its redemption. It is argued that government, of the kind existing in the United States, is not best calculated to to secure the redemption of paper money for several reasons: (1), government policy is likely to be dictated by party politics; (2), the government can not be compelled to pay its debts, because it can not be sued; (3), government policy is likely to be changed from time to time as various political parties prevail. The change in the financial policy of the government which has taken place while this book is in preparation (April 1893), illustrates the force of the last argument.

For many years it has been the policy of previous administrations to keep in the treasury of the United States, a certain amount of gold as a reserve for the redemption and security of the outstanding paper money. This policy has been changed and the gold reserve is treated as so much cash in the treasury with which to pay all demands whether upon notes or otherwise. For these various reasons it has been urged that private bankers alone should be authorized to issue paper money subject to government control.

Convertible Notes Self-Regulating.—In the early part of this chapter it was stated that the volume of a nation's money is self-regulating. That is to say, the amount in circulation will depend upon the demands of trade, and a country will naturally have as much money as it has use for. If there is a deficiency, the demand thus created will be supplied from other countries. The same thing is true of convertible paper money.

Its issue is self-regulating. No more will circulate than is wanted, and no more than is for the interests of government or the banks to issue. If more is issued than is needed or wanted, the people who do not want it, will take it to the banks or the treasury and exchange it for coin. Neither the government nor the banks would be benefited therefore by the overissue. The term "inflation" is frequently applied to the overissue of any kind of paper money. It should properly be used only in connection with the overissue of inconvertible paper money. It does not pertain to the overissue of convertible paper money, because that can not be overissued. No law or power can force into circulation more paper money than is wanted so long as that money is redeemable in gold. Governments cannot do it, nor can the banks do it.

Inconvertible Notes not Self-Regulating.—With inconvertible paper money the case is different. Inconvertible notes once issued stay issued. When the issue becomes greater than is wanted, the holders can not take the notes and exchange them for money. Each issue is cumulative, like lead poisoning. Paper money of this kind must therefore be kept well within the requirements of trade. Overissue of it constitutes genuine inflation, and the moment the proper limit is overreached it begins to depreciate. With every overissue the whole volume loses its purchasing power.

The Silver Question.—So far throughout this chapter, little distinction has been made between gold and silver as money. Both have been referred to as possessing the natural qualities fitting them to perform all the functions of money. Both are designated as precious metals. Both are coined and governments determine the ratio of value between them. The time has now come, however, when we must discuss their relations. It is the "silver question" which has for many years been a problem, both political and economic, in the United States. The question may have seemed somewhat perplexing. That is no reason, however, why we should give it up. The whole matter is very simple when once a few leading principles of money coinage are clearly understood. We must commence right, however, and not shut our eyes to good

economics. The air of perplexity which hangs around the question has frequently been fostered by the specious arguments, on the one hand, of people who have stock in gold mines or who have debts owing them and want to advance the interest of gold as money, and on the other hand, of people who have stock in silver mines and would like to see silver go higher, which is the result the more it is used as money.

Bi-metallism, means the use of both gold and silver for the purposes of money and as a standard of value. Monometallism consists of using only one of the metals as a standard of value. If the two metals were of equal value, that is, if they were equally distributed throughout the world and the cost of mining them was the same, the question would be solved for us. Silver is more widely distributed than gold. It not only occurs more frequently, but where it does occur, it is frequently found in larger deposits. More of it is mined than of gold. The cost of mining it is less than the cost of mining gold. It is necessary, therefore, for government to fix a ratio of value between silver and gold, if both are to be used as money. Government does not create the value of either of them. It simply determines how many grains shall constitute a dollar, just as it determines how many pounds of wheat shall make a bushel. Bi-metallism is also known as the double standard, because it involves the use of the two metals as a standard of value. Monometallism is the single standard.

Fixing the Ratio.—Before going any deeper into the subject, let us see if we understand what is meant by "ratio," as applied to gold and silver coinage. For the sake of illustration, we will suppose that a nation decides to have a unit of coinage to be called a dollar, the standard to be monometallic with gold as a basis. It determines how many grains of gold shall constitute that dollar. It may fix upon any number of grains at random. If it decides that ten grains shall be the amount, then the gold dollar will exchange in the market for ten grains worth of corn or potatoes or labor. If it is determined that the dollar shall contain one hundred grains of gold, then it will buy ten times as much corn or potatoes. We will suppose the government finally decides that 25.8 grains, 9-10

fine, shall be the amount to go into a dollar. Now it becomes necessary to say how many grains of silver shall constitute a dollar. It is a little more than that, however. The real question to be determined is, how many grains of silver shall be equal to 25.8 grains of gold, both being of equal fineness? After much calculation suppose it appears that 412½ grains of silver are just as valuable as 25.8 grains of gold. In other words, either will exchange for the same quantity of other commodities, the fineness being the same. The government directs that 412½ grains of silver shall make a dollar, and shall be equal to a gold dollar, and thus the ratio is established. The coinage of the United States has been in these proportions for many years. The silver dollar, coined as above, is what is known as "the dollar of our fathers."

Fluctuating Ratio.—It is one thing, however, for government to establish a ratio value between the two metals and quite another thing to maintain it. Fluctuation in the values of the metals might be expected. The value of wheat fluctuates from year to year, in proportion as the aggregate crop of the world is greater or less than the normal. There have been periodical fluctuations in the relative values of gold and silver, owing to differences in the several quantities produced. There are eras of silver production, when silver has been mined in extraordinarily large quantities. Again there have been periods when the quantity of silver mined has fallen off and the production of gold has increased. These periods seem to follow each other, and it is seldom that great gold production has coincided with great silver production. In 1794 the Federal Congress provided for the coinage of a silver dollar to contain 416 grains of coin silver. This is equal to 371.25 grains of pure silver. It had solved the easy part of the problem by arbitrarily fixing upon the number of grains of silver to be put into the dollar. It then came to the hard part of the problem, that is, to find how much gold should be equal to 416 grains of silver, the fineness being the same. The wisest financiers were employed. It was finally reported to Congress that gold was worth about fifteen times as much as silver, and Congress therefore established a gold dollar contain-

ing one-fifteenth as many grains of pure gold as the silver contained grains of pure silver. This caused the gold dollar to contain 24.75 grains of pure gold. In other words, Congress determined that 24.75 grains of pure gold should be equal to 416 grains of pure silver. It was soon discovered, however, that a mistake had been made. It was supposed that Congress had made the mistake, but as a matter of fact, the relative value of the two metals changed and it came to pass that the silver dollar was not worth as much as the gold dollar. In 1834 Congress tried to remedy the matter by putting only 23.2 grains of pure gold into the dollar. This made the ratio 1 to 16. It did not help matters much, because in a short time the gold dollar was found to be worth less than the silver dollar. The foregoing facts with reference to United States coinage are stated upon the authority of Graham Macadam, and his excellent treatise, *An Alphabet of Finance,* is recommended as a source of additional information.

The European Ratio.—France was one of the first nations to fix the European ratio between gold and silver. In 1803 a law was enacted in that country declaring that every debtor should have the right to pay his obligations in gold coins, or in silver coins containing $15\frac{1}{2}$ times the quantity of silver. The ratio was fixed at $15\frac{1}{2}$ to 1. Spain, Italy, Switzerland and Belgium afterwards agreed upon the same ratio, and they joined with France to form the Latin Monetary Union. The nations composing the union entered into a compact to maintain the ratio between gold and silver at $15\frac{1}{2}$ to 1. For about seventy years this ratio was maintained by the combined action of these countries, and it has come to be known as the European ratio. It is also referred to as the customary ratio. The ratio of 16 to 1 is known as the United States ratio.

Fineness in Coinage.—Coins in daily use are subject to abrasion. They should have the highest possible wearing quality. It is found that an alloy will answer this and other requirements of coinage better than the pure metal. It is usual, therefore, to combine some copper with the fine gold and silver. The gold and silver coins of France, Germany, Spain, Italy, Belgium, the United States and of nearly all the modern

nations contain one part of copper to nine parts of pure gold or silver. A coin nine-tenths fine, therefore, or one which contains nine parts of pure metal and one of copper, is of the *standard* fineness.

Effect of Difference in Values.—There is a well known monetary law, known as Gresham's law, because it was formulated by Sir Thomas Gresham about three centuries ago. As applied to money circulation it reads thus: "A superior and an inferior money cannot circulate together. The inferior will drive out the superior." Bearing this in mind, let us observe the effect when the ratio which has been established by government is disturbed by the rise or fall of either of the metals. As long as the parity is maintained, the coins of the two metals circulate indiscriminately and there is an equilibrium of coinage. But suppose there comes a period of extraordinary activity in silver mining when extraordinarily large quantities of silver are put upon the market. The price of silver, relative to gold, falls, and the ratio is broken. The silver dollar is no longer worth as much as the gold dollar. Every debtor, however, prefers to pay his obligations in the cheapest money, in coins of the cheaper metal, and so silver drives gold out. We can apply here the illustration which was given in the earlier part of the chapter, of the Connecticut tax payers paying taxes in "lank kine." Gold is either melted or sent abroad to buy foreign commodities. When silver rises above gold, then gold becomes the medium of payment. The dollar of the lower value is always the money in circulation, and hence, the practical standard of value. Advocates of bi-metallism or of the double standard, profess to find in the fluctuation between the relative values of the metals, an argument in favor of their theory. They say, that if both metals are used as money in the shape of a double standard, although both are liable to fluctuations in value, yet if either may be offered in liquidation of debts, the one will always be chosen which is the lower in value, with the result of correcting the difference. In other words: "With every fluctuation in the relative values of the metals, the function of money falls upon the lower metal, the

other metal flying away; but if a lower metal comes in greater demand, it must rise in value, hence the tendency is to a continual return to the balance." The aim of this argument is to show that bi-metallism is self-regulating.

Free Coinage.—Bi-metallism involves something more than the mere setting up of a double standard. It means that the nation employing it must coin all the gold and silver which anybody desires to have coined. The mints of the nation must be open to all owners of gold and silver bullion. They are entitled to have it coined at the ratio fixed by government. This is free coinage. Those who oppose bi-metallism claim that the free coinage system is not practicable unless adopted by all nations, because the countries which do not adopt it will send their silver where coinage is free and take away gold instead.

International Bi-metallism.—Those who maintain that bi-metallism can be successfully and permanently introduced, have been gradually increasing in number for some years past. They are still in a minority, however. Mono-metallism, with gold as the basis, such as has been practiced in the United States and Germany, is the favorite system. If, however, the United States, together with the principal nations of Europe, could agree upon a bi-metallic system, and thus inaugurate international bi-metallism, there are indications that it would be successful. The necessity of coining the silver of other countries, and the consequent loss of gold, which is the bugbear of free coinage, would not then exist.

The Functions of a Bank.—There is a common-place error which sets a bank down as an institution for receiving the money of the people and storing it in vaults for safe keeping. If such were the case there would be no banks, because no bank could live if it kept the money of its depositors lying idle in its vaults. There are safe deposit companies which have vaults for the safe-keeping of money and valuables, but the owner has to pay for all the privileges he gets there. A bank must loan out its deposits and keep the money in circulation, and, therefore, the "strongest" bank in the world would fail, if all its depositors demanded their money at the same time.

Savings Banks, so popular in the United States, are not known in many countries. A savings bank may receive deposits of money for safe keeping, but not with the intention of storing them. The depositor receives interest upon his deposit. If the bank puts the deposit away in a vault, how can it afford to pay interest? It receives the deposit only to loan it out again at a higher rate of interest than it pays the depositor. It proceeds on this theory and it expects that the average depositor will allow his deposit to remain for a certain length of time before calling for it. It can safely loan out a large proportion of its deposits relying upon this expectation. When there are a large numbers of depositors the bank will at all times have a large amount of money in its keeping waiting to be called for. While savings banks are corporations, regulated and chartered under State laws, in their relations to depositors, they are theoretically nothing more than firms or individuals receiving money in trust and for safe keeping, to be returned on demand. Their control by the State creates the confidence in their ability to repay, which private individuals could not command. The first London bankers were private individuals performing the functions of savings banks. In those times law and order were not universally prevalent. Thieving and armed robbery were common. The Lombard street merchants were mostly jewelers who had strongly fortified places of business and maintained armed guards. People who had no such places of security were wont to take their valuables there for safe keeping. The goldsmiths gave receipts for the property deposited, whether of money or valuables. These receipts finally became negotiable by endorsement. They were the forerunner of the bank note of our day.

Banks of Deposit, or discount banks, as they are sometimes called, are distinguished from savings banks chiefly by the fact that they allow no interest on general deposits subject to check. They are called discount banks because they buy or discount commercial paper, a proceeding which savings banks are not usually allowed to do, by law. These banks receive very little money. Instead of money, they receive checks, promissory notes, bills of exchange and warehouse receipts. They re-

ceive evidences of debt, titles to money, and claims upon other banks and other people. Sir John Lubbock, who was connected with a London bank, made a computation of the amount of money and of the amount of commercial paper actually paid into the bank during a given time. He found that out of a total sum of nineteen million pounds, paid into the bank, only one-half of one per cent. was in coin, and there was only three per cent. of coin and bank notes together. Ninety-seven per cent. was composed of checks, bills and various forms of commercial paper. The function of the bank is not simply the collection of this paper by presenting it to the debtor, receiving the money and returning it to the creditor. A bank is not a collector. In fact, banks do not care to receive money. They prefer to receive good commercial paper, because experience tells them that the money due from them, upon the paper, will not be called for by their customers for some time. Until it is called for they may loan it to others for a consideration in the shape of interest. They do not know how long any particular customer will leave his account with them, but experience has demonstrated the general average, and therefore they know the percentage of deposits which they can safely loan. A large portion of the business of a modern bank and a most profitable part of the business, is the discounting of promissory notes. A customer of the bank receives from a debtor a promissory note payable in three months, we will say. The customer has immediate use for the amount of the note. He takes it to his bank where the amount of the note is placed to his credit, or paid to him, less a certain percentage which is agreed upon as discount. The bank makes by the transaction, the amount of this discount. In this way it has loaned the money of its depositors.

The Clearing House.—In the course of a day's business a bank receives many checks and drafts on the various other banks in the same city, and upon other banks in different parts of the country. It pays to its customers or credits them with the amounts of these checks and drafts. It is bound to present them at the place of payment and get the money due on them. There was a time when it would send a messenger or officer,

daily, to each of the other banks in the city with its checks and drafts for collection. In the smaller towns that practice may still be followed. The larger cities have a clearing house. It is an institution under the management of all the banks of the city—all having a voice in the choice of manager. A room is secured for the common business, and each bank has a representative there. The representative receives from his bank all the paper which has come in during the previous business day. He presents to the representatives of the other banks the checks which he holds against them. To illustrate, the Bank of Columbia has checks and drafts aggregating $10,000 against the Empire Bank; but the Empire Bank has checks and drafts against the Bank of Columbia aggregating $9,000. The Empire Bank, therefore, owes the Bank of Columbia $1,000. The Bank of Columbia receives a ticket from the clearing house manager certifying to this fact. This ticket may be passed into the assets of the Bank of Columbia as so much cash, or it may be paid in cash by the Empire Bank. Without the aid of the clearing house it would have been necessary for an officer of the Empire Bank to go to the Bank of Columbia and draw $9,000. An officer of the Bank of Columbia must have gone to the Empire Bank to get $10,000. By using the clearing house, the difference of $1,000, only, is handled in cash. The clearing house then is simply an institution by which the banks adjust the accounts between themselves. They pay each other merely the difference of their accounts, and thus avoid the labor of handling the actual amounts to which they are entitled from each other.

PART V.

INTERNATIONAL ECONOMICS.

CHAPTER I.

INTERNATIONAL COMMERCE.

Introductory.—It is now the formative period of International Economics. The statement previously made, that much economic knowledge remains to be made definite and certain, applies with peculiar force to the department of international economics. The nations of the earth, are slowly feeling the way to a world economy, concerning which something may subsequently be said. Before it can be reached, some differentiation of the national economy will be required. It might be profitable to speculate as to the forms which this differentiation may assume, but we are dealing with descriptive economics, and therefore, will pass on to the statement of the best known and more important facts of international economics—those which we know relate to international economy, although the precise relationship may yet be undetermined, owing to the undeveloped condition of this branch of economic science.

Commerce between Nations, is the foremost subject of international economics. The word commerce, in this connection, is used as conveying not only the usual and ordinary meaning, (1) the interchange of goods and productions, by barter or sale and purchase, but also (2) international intercourse and dealings. We first take up the subject as expressed in the first meaning, that is, the international exchange of goods. The subjects connected with the second meaning, will then be discussed. International trade, is not merely the foremost subject

of international economics, it is one of the important subjects connected with all economic discussion. As Professor Gide says:— "There is no subject in political economy, hardly, perhaps, in any sphere, which has stirred up more controversies, caused the writing of more volumes, nay, even occasioned the firing of more cannon balls."

The Evolution of Commerce.—The steps in the development of commerce, have been stated from time to time during the progress of the work. The chapter entitled "The Trader," contains in particular, an outline of the growth of commerce. It commences with the barter, by the economic family, of a surplus arising from good fortune in the chase, and extends through barter in ornaments to the exchange of raw products between villages. In the city stage of economics, it first assumes the character of a stated interchange of products, both in the raw and manufactured state, and a surplus is then sought to be created for the purposes of the interchange. Barter breaks up into sale and purchase. Commerce is intermunicipal, however. The city is the market. In the present economic stage, the market is:

A World Market.—The demand of the whole world fixes the supply and the price. The farmer grows wheat for the world market; the shoe manufacturer makes shoes for the world market, not for the market of Lynn or Rochester; the merchant buys and sells in the world market. There is no *customary* price. The members of modern industrial society produce but one or two things for the market. Frequently, they produce only one part of a number of parts which are afterwards put together to make the complete article. The parts representing the labor of many different men, manufactured frequently in distant portions of the world, are brought together, adapted and connected to make up a whole. A great shoe factory, means some hundreds of families engaged in producing a single necessary want. It frequently happens also, that the making of shoes, is the chief industry of a town. Other towns are devoted to iron manufactures, and others to woolen or cotton goods. The townspeople seldom use their own manufactures. Their shoes and their clothing are made elsewhere. The distribution is

affected by that factor of industrial society, called commerce. Commerce takes the shoes from Brockton and Lynn and from the great shoe towns where they are manufactured, and where there is a surplus of shoes, and distributes them throughout the country, among cities and towns and hamlets, where they are not made, and among foreign peoples. It takes back to the shoe towns, leather from the tanneries, and wheat and beef from the agricultural districts, which it exchanges for shoes. It exchanges some of the shoes for raw hides, which it gets from the tanneries. Its agents are the merchants, the railroad, the ship, the telegraph, and the banks.

The Control of Trade.—Economic discussion bearing upon international commerce, relates mainly to the regulation and control of such commerce. The historical evolution of commercial regulations, therefore, is the proper beginning of the discussion. While some of the steps in the development have been mentioned from time to time, there has been no attempt to state them connectedly. They may be briefly summarized as follows:—

1. *Family Control of Trade.*—We commence with the earliest stage of economics, that relating to the economics of the family. Property is owned and enjoyed collectively, and each economic family, as a unit, jealously regulates the interchange of commodities with other families. The economic family, as we have seen, includes the nomadic horde or tribe. It is the domestic group irrespective of number. In the part devoted to the economics of the family, the regulation of interfamily commerce was illustrated by reference to the custom of the Nubians, according to which, when one tribe prepares to trade with another, the lines are drawn up in battle array, and the interchange is affected between the lines, by individuals selected for that purpose. Among monarchic tribes, the control is exercised by the chief, primarily for his personal benefit, and secondarily for the benefit of his tribe. J. G. Wood, in his *Uncivilized Races of Men*, makes a statement regarding certain customs existing among the Ahts of Vancouver's island, which illustrates the formalities attending tribal intercourse. His statement is this:—"Many disputes arise between tribes, on the

finding of dead whales, near the indefinite boundaries of the tribal territories. If the quarrel is serious, all intercourse ceases, trade is forbidden, and war is threatened. By and by, when the loss of trade is felt, negotiation is tried. An envoy is selected, who is of high rank in his own tribe, and if possible, connected with the other tribe, by marriage. He is usually a quiet man, of fluent speech. Wearing white eagle feathers in his head dress, as a mark of peace, he departs in a small canoe. Only one female attendant, generally an old slave, accompanies him, to assist in paddling, as the natives never risk two men on such occasions. The envoy's return, is anxiously awaited. As a general rule, the first proposition is rejected. Objections, references and counter-proposals frequently make three or four embassies necessary, before the question can be settled."

2. *Village Control of Trade.*—When the village community stage is reached, there are signs of stated interchange of commodities between villages. Many villages begin to produce a surplus, and by degrees they learn to exchange the surplus with other villages. But it is common property, in case of the primative villages, and the entire community, through its civil organization, controls and regulates the exchanges. There are some evidences going to prove that among certain village communities of the East, there was a communal officer, chosen at birth, who had absolute authority in the matter of regulating inter-village trade. The economic rivalry which culminates in the stage of the municipal economy, begins to show itself and villages regulate commerce in an endeavor to obtain advantage over rival villages. Each community levies toll and taxes upon the members of other communities, desiring to engage in trade, to the end that the community, as a unit, may receive whatever benefit lies in inter-village commerce.

3. *City Control of Trade,* has been stated at length in the chapter entitled "The Trader." Community of property has long since disappeared and private ownership, at least of personal property, has taken its place. Inter-municipal commerce is not regulated because the citizens have a common interest in the commodities of exchange, but for the purpose of enhanceing the value and benefits of citizenship. Economic rivalry

between cities is intense. The one absorbing purpose of each city is to obtain economic supremacy and directly and indirectly further the fortunes of the citizen class.

The Balance of Trade.—In a preceding part of the chapter the statement was made that the manufacturers of a shoe town pay for the leather which they bring into the town by the shoes which they ship out. All the raw products used in the process of shoe manufacture and the food and clothing of those engaged in the industry must be paid for by exchanging shoes. Exportation and importation, in connection with the industrial activity of the town, is constantly going on. Manufactured goods are being exported and raw products and necessary subsistence for the inhabitants are being imported. The balance of trade is the difference between the exports and the imports. If the town exports more than it imports, the balance of trade is in its favor. If it imports more than it exports, the balance of trade is against it.

The Balance of International Trade.—In the same way, nations are exporting and importing. They are exporting those classes of manufactures and of agricultural products of which they have a surplus, and importing those classes of which they have a deficiency. They pay for their imports with their exports. It is really a process of barter. Exports are exchanged for imports. Europe does not ship to the United States the cash to pay for our wheat. She offsets our account by the price of the textile fabrics and other things which we get of her. If we export more than we import, then the balance of trade is said to be in our favor. We have a favorable balance of trade, in which case Europe would be obliged to ship money to us to pay this balance. The balance of trade theory began with the prosperity of Venice and Genoa. For many years afterwards there was a struggle among European nations to acquire a favorable balance of trade. It gave rise to a school of economists known as the mercantilists. In the opinion of the mercantilists the one thing which would assure the material welfare of a nation was a favorable balance of trade. They believed that if a nation exported more goods than it imported, and the difference came back in gold or silver, and thus

increased the supply of money, the nation couldn't help being prosperous. They reasoned that the possession of money is the first condition of wealth, and the nation which has the most of it must be the wealthiest. They urged that each nation should strive by every honorable means to obtain the money of other nations by creating a favorable balance of trade. Under the stimulus of these doctrines commerce was unduly magnified. It came to be fostered at the expense of agriculture and manufactures. This theory of the mercantilists, modified to suit the growth of economic thought, has come to be known as the balance of trade theory.

The Theory Opposed.—The proposition, that if a nation's imports exceed its exports it will be poorer to the amount of the difference and after a time the loss of money will be felt, looks reasonable on its face. The balance of trade theory, therefore, has never lacked for advocates since it originated. It is lost to sight now and then, but only temporarily. It is soon revived and there is a constant tendency to go back to it as a foundation for argument relating to the expediency of international trade regulations. There are those, however, who deny the truth of the premises upon which the balance of trade theory is based. They do not accept its conclusions either. It assumes, they say, that the welfare of a nation depends upon the amount of money which it has; that if nations keep money flowing toward them by keeping the balance of trade in their favor they are certain to be prosperous. They oppose it because it does not found national welfare upon the volume of trade and industry or upon the number of people who are profitably employed, but solely upon the possession of money. They hold that no conclusion whatever can be drawn as to national wealth or poverty from the mere fact of a favorable or unfavorable balance of trade. It is claimed that the unsoundness of the theory is illustrated by the fact that many countries, at various times, for periods of considerable duration, have had unfavorable balances of trade and yet to all appearance have been a prosperous and contented people. Germany, France, England and Belgium, are shown to have prospered during periods when balance of trade has been against them.

It is argued that because prosperity accompanies a favorable balance of trade, it is no proof that the favorable balance creates the prosperity. It is further argued that in international trade, both sides better their condition, irrespective of the balance of trade.

Regulation of International Commerce.—The very fact that this theory of the balance of trade exists, is a partial explanation, at least, of governmental regulation of international trade. It is a good excuse also for such regulation, for if a favorable balance of trade has anything to do with national wealth and prosperity, why shouldn't international trade be regulated so as to create, to the greatest possible extent, a balance of trade in favor of the nation enacting the regulations? An original motive for the enactment of international trade regulations then, was to secure a favorable balance of trade. Another motive was to procure a national revenue. These are the motives impelling action in modern times. Among the nations of antiquity and among Asiatic nations until recently, there was still a third motive. It was the prevention of international communication. In their eyes all foreigners were barbarians, and the less they had to do with them the better.

The Form of the Regulations.—In modern times the regulation of international commerce is chiefly affected by tariff or customs laws. They are laws imposing a tax upon international exports or imports. Their effect is to compel a merchant desiring to ship goods abroad or bring them into the country from abroad, as the case may be, to pay a tax upon them at the port of shipment or entry.

Two Kinds of Tariffs.—Tariff regulations may be divided into two main classes, corresponding to the two purposes for which they are mainly levied in modern times. Their purposes, as already appears, are to create a source of government revenue or to advance the industrial welfare of the nation. Tariff regulations which are designed to procure revenue are Revenue Tariffs. Tariffs having the other object in view are Protective Tariffs. The latter nomenclature arises from the fact that protective tariffs are designed to protect home production and home industries against foreign competition arising from the

importation of foreign goods. The abolition of all trade regulations whatever, is free trade. A policy between a tariff for revenue only and a protective tariff, is frequently advocated and sometimes put into practice. It involves the imposition of such taxes as will secure the desired government revenue and at the same time protect home manufacturing industries. It involves, therefore, the imposition of taxes on certain classes of imports only. The imports which are free, according to this half-way policy, consist mainly of raw products of other countries upon which the labor of our own people can be expended. It is claimed that home manufacturing industries are thus stimulated and home labor finds employment. Tariff for revenue only is the present policy of England. Taxes are imposed upon imports, luxuries mainly, solely with the view of procuring a revenue for the support of the government. Tariff for protection has been the policy of the United States for many years. The amount of the tax imposed has fluctuated however, as different political parties or party leaders have controlled the government. There have been times when the duties imposed have been so low as to produce only necessary government revenues. At other times they have been so high as to absolutely prohibit importation of foreign goods except at a loss to the importer.

Free Trade and Protection.—Descriptive economics is not concerned with the advocacy of theories. Its object is rather to describe all theories which have appreciably affected economic history. It is not interested, therefore, in seeking to know whether free trade or protection is the correct theory. It prefers to state the arguments for protection side by side with the arguments for free trade. No inference is drawn, as to the relative weight of the several arguments, from the order in which they are stated. One protectionist might claim a superiority in favor of some one argument over all others, while another protectionist would give that argument an inferior place.

Arguments for Free Trade.—We will state first some of the leading arguments advanced by those who advocate unrestricted international commerce. When they are examined

it is seen that the number of those arguments which are independent of each other and are of a primary nature, are very limited. The same observation will apply to the protectionists' arguments. They dove-tail together and depend upon each other. Most of them grow out of a few fundamental propositions. For convenience of reference we will number them, bearing in mind that the order in which they are stated is not intended to indicate priority.

1. *Advantages of Market.*—If foreign trade is unrestricted we can sell our surplus productions in the highest market, and provide for our deficiencies in the lowest market. If foreign products can be sold to us more cheaply than home products, but by artificial means, like the tariff, they are kept out of market, then the restriction compels us to pay an artificial price. For instance, we can raise beef on our western prairies more cheaply than the English farmers can produce their beef supply. We ought, therefore, to be allowed to take our beef to England, and if England can make iron cheaper than we can make it, we should be allowed to exchange our beef there for iron and bring back the iron for use at home. We are, therefore, prevented from selling in the dearest market and purchasing in the cheapest, and one of the results is to make our own home products dearer.

2. *Procuring Exotic Products.*—If international trade is free and unrestricted, every nation by making the proper exchanges can obtain those commodities not natural to its climate, or which could not be produced except at great cost. In modern times various products have come into demand in every nation, and have become necessities of daily life, which are non-indigenous, and cannot be produced there, except at a cost far in excess of the cost of production abroad.

3. *The Greatest Good to the Greatest Number.*—The artificial price which results from placing a protective tariff upon imported goods, gives an extra profit, to be sure, to those who are engaged in producing or manufacturing those goods at home. That extra profit, however, is distributed among a few persons only. Industrial society as a whole gets comparatively little benefit from it. It is not a compensation for the increased

price which the mass of people have to pay. Further, if we have to pay more for imported necessities, having only so much income to spend, we can buy less home goods. For this reason protective duties become scarcity duties.

4. *Protection is Robbery.*—It violates the natural law of supply and demand. It infringes upon the right of each one to buy and sell where he chooses.

5. *Ultimate Injury to Home Industry.*—If there were no protective tariff, manufacturers engaged in protected industries would employ their capital in other industries, which are naturally of such a character as to be profitably carried on at home. Home capital would be thus employed in carrying on the natural industries of the country, and the products thus obtained could be exchanged for the products which can be made more cheaply in other countries. Both sides would then be benefited, and it would be better for each nation to engage in the production of those things which its natural resources enable it to produce at the least cost.

6. *Limitations upon Exports.*—If imports are limited by the protective tariff, in the end, exports will also be limited, and will be limited to an equal extent. This must be the fact because countries to which we export cannot continue to pay us interminably, unless we import from them. Some time or other it would come to pass, that we must stop exporting because there would be no foreign market for our surplus.

7. *Increase of Industry not Real.*—Hinderance to importation of foreign commodities does not produce any real increase of industrial activity. It does not give room for greater investment of capital, or furnish a greater outline for labor. It results simply in a change in the direction of application. It does not follow that because a nation consumes less of foreign commodities by reason of protective tariffs, that the difference is produced at home.

8. *Assisting Some and Injuring Others.*—A protective policy affords an opportunity for special legislation. Special interests get control of legislation, and tariff laws become class laws. One industry is protected, while another is not. Protection to one industry always injures some other industry. It is difficult,

if not impossible, to frame tariffs so as to bear equally on all industries, on all manufacturing industries, as well as upon agricultural and commercial industries. Protectionism comes to foster monopolies, and enables gigantic combinations to control industrial enterprises.

9. *The Benefit to the Working Man.*—If protection effects any amelioration of the condition of the employe class, it is only temporary at the least. If foreign industry is decreased by reason of protective tariffs, foreign labor soon seeks our shores. If an artificial price, imposed by a protective tariff, increases home production and causes more wages to be paid out, it is a relative payment only, and not an absolute payment. That is to say, wages at home may be relatively higher, but not absolutely higher. If it is desired to protect home labor, a tax should be put upon the importation of labor, so as to make labor dear, and then foreign commodities should be imported for subsistence. Moreover, while the wages of laboring men may appear to be higher at home than abroad, indirectly he is assessed to pay the increased price imposed by the tariff. The laboring man is a tax payer as well as the capitalist. The heaviest tax payer is he whose income bears the closest relation to the necessities of life.

10. *Protectionism and Patriotism.*—Protectionism is not necessary in order to create patriotism. International communication has never been so far reaching, and international commerce never so widespread, as in modern times. There has been no loss of patriotism, however. Nationalism has rather assumed higher and more pronounced forms.

11. *Survival of Medievalism.*—Protectionism is a survival of the economy of the middle ages, when the gilds and the gild system exercised a despotic power over industry. It is applying to international commerce the medieval restrictions and regulations which were applied to domestic and intermunicipal commerce. This argument is illustrated by the curious regulations of trade which existed in the city of London in the early part of the 14th century. It is related that one Thomas Lespicer of Portsmouth, brought to London six pots of eels. Instead of standing with them in the open market for

four days, which by law he was bound to do, he took them secretly to the house of a fishmonger, secreted them there for two days and afterwards sold them without bringing them to the open market. Thomas confessed his guilt and took oath that henceforth he would always sell eels at the proper place, and the fishmonger likewise confessed his guilt, and took oath that he would always tell strangers where they ought to take their eels. Later on, Londoners were glad to know that the king ordered that aliens as well as denizens might freely buy and sell "to what person it should please them."

12. *Abandoning Protection.*—If protection is a temporary expedient for the promotion of young industries in new countries, who is to say when it shall be abolished? How shall it be decided when the time is come that certain industries shall be surrendered "to all the wind, rain and sunshine of free competition?"

13. *Protection and the Industrial Stage of Economics.*—Finally it is argued that in any event protection cannot be favorable to a country, unless it has entered upon the industrial stage of economics. All the factors of national economic life must first be brought into action. Domestic commerce must have reached its full development. Manufacturing industry, mining and agriculture must have first come to work in unison, and the division of employments must have become fully developed.

Arguments for Protection.—An analysis of the foregoing free trade arguments, shows that some of them are devoted to denials of the claims of the protectionists. They are not strictly arguments, and many of them are not worthy of being called arguments. The same observations apply to the arguments for protection which follow. They are worth bearing in mind, however, because they form a part of current tariff discussion and need to be stated if only to expose their sophistry.

1. *Foreign Capital Brought in.*—The imposition of protective duties produces a change in the direction of the investment of capital, and likewise a change in the application of labor. Home industry is increased, and foreign industry decreased to a like extent. When foreign factories are closed

and workers are idle there, there must be just so many more factories in operation at home, and so many more workers busy. One man's gain must be some other man's loss. Labor is benefited, wages are increased, and amelioration and prosperity ensues. Moreover, the capital which would be profitably employed in foreign countries must find investment in our own country, and furnish so much more employment here. Within the last few years, much English capital has been invested in the United States. Syndicates, as they are called, have been formed of English capitalists, and great American industrial concerns have been transferred to the syndicates.

2. *Infant Industries.*—Economic growth, from the lower to the higher stages, may be rendered difficult if unrestricted competition with foreign industry, already developed, is allowed. New industries will be stimulated by restricting foreign importation, and efforts will be made to produce those things which will satisfy the highest economic wants. The natural resources of a new country will thus be developed. New incentives and impulses will be spread. If there is no protection in a new country, industrial talent will be undervalued and forced to emigrate. Younger nations will be compelled to act as agricultural districts, while other nations are as cities and the centers of industrial activity. For the purpose of establishing and developing new industries protection may be merely a temporary matter, and after they are established, it may be abolished.

3. *Protection and Nationalism.*—The protective system develops political independence as well as economic independence. It is productive of nationalism and patriotism, while free trade promotes cosmopolitanism. Patriotism and love of country are prime requisites of national welfare, and whatever will bind a people together should be encouraged. Protectionism will bind them together, because it separates them from the other nations and makes the various parts of the country economically dependent. It is the duty of the state as well as the individual "to provide for his own, especially them that are of his own house."

4. *Military Necessities.*—"In time of peace prepare for war."

Each nation should so regulate its economic affairs that in case of war it will not be crippled by being cut off from a base of supplies.

5. *A Social Leaven.*—Protective tariffs tend to do away with distinctions between economic classes. Such distinctions are more pronounced among people living in an agricultural condition, or among a people whose industry is mainly directed to the production of raw materials. In those conditions a landed aristocracy usually prevails. By shutting out foreign manufactures, home manufactures must take their place, and the artisan class, always a great factor in national economy, assumes a prominent place. Thus protection exalts the artisan class at the expense of the landed class, and leavens society.

6. *Protection in History.*—The nations of antiquity gave little thought to the protection of industry. It is an historical fact that their industries were invariably insignificant, and were confined to the handling of raw products.

7. *Protection is not Robbery.*—The so-called right of man to buy and sell in any market, does not exist. The individual must surrender his individual rights to the state for the common welfare. Individualism must give way to nationalism, and individual economic life must be subservient to the economic life of the nation. The whole state must be considered a unit, as to economic questions which affect the entire population. The state ought to do what is best for the whole people, and if restriction of foreign commerce will best subserve the nation as a whole, individual rights must be surrendered.

8. *Equilibrium of the Three Industries.*—Free trade creates an undue development of commerce and manufactures at the expense of agriculture. It prevents the three industries from assuming a due balance. Varied industry is the foundation of modern national welfare. It is neglected under the free trade policy. The country which becomes as a vast city and the rest of the world an agricultural country, taking its surplus to the city in exchange for the city manufactures and luxuries, assumes an economic one-sidedness. England has boasted that under her free trade system she would become as such a city,

with other nations, like agricultural districts dependent upon her. It is argued that while she may have become such, it has been at the expense of severe agricultural depression. Her farmers are in a most forlorn state.

The Solution of the Question.—It is plain that both sides cannot be right. Many of these arguments are diametrically opposed to each other. If some are true, others are false. Both sides deal freely with statistics to prove the truth of their arguments. In such cases statistics are usually misleading. No inference can ordinarily be founded upon them. Doubtless circumstances of time, place and physical limitations must be taken into account in applying either the free trade or protective system. The true solution may depend upon some of these circumstances:

a. *The Stage of Economic Growth.*—Protection may be a good thing at one stage of national economic development, and free trade at another.

b. *Physical Environment.*—The climate, soil and diversity of natural resources must doubtless be taken into account. It would be folly for a nation to restrict the importation of commodities which it cannot produce at home.

c. *Territorial and Physical Geography.*—A nation extending over many degrees of latitude, with diverse climates and diverse agricultural resources, is in a far different condition to talk about free trade or protection, from that of a nation possessing a limited territory with a uniformity of climate and natural productions. Internal waterways and means of internal communication, as well as extent of seacoast and possession of numerous harbors will also be taken into account.

d. *The Proximity of Neighboring Nations* will also have a bearing upon the commercial policy of a nation. England enjoys a pre-eminent situation for international trade. The extent of her sea coast and the number of her harbors compare favorably with extent of territory. Why should not these things be taken into account in determining what her policy should be, and why should not a nation devoid of these advantages, take that fact into account?

Economic Progress.—Closer international communication

would seem to be in harmony with the progress of industrial society. There appears to have been a gradual evolution of industrial society, commencing with the barbarous, isolated family as an economic unit, through the village community and then the city to the nation. With each advancing step intercourse has been closer. Mutual co-operation between the units has increased. To restrict international commerce and thus indirectly restrict international intercourse would appear to be like throwing a stumbling block in the way of the further development of industrial society.

Importance of the Subject Overestimated.—The question of restricting or regulating international commerce, has been given undue importance as compared with other economic questions. Its importance has been overestimated by reason of the political cast which has been given to its discussion. Having been made a purely political question instead of an economic question, its debate has been heated and rancorous, rather than reasonable and decorous. If more attention were paid to questions relating to the development of internal commerce; to the installation of means for domestic transportation, more good would be done. It is pointed out that by international commerce, only one side is benefited. With domestic commerce, both sides to the transaction are benefited. There is greater rapidity of circulation in the case of domestic commerce. Capital is turned quicker. It is said that twelve exchanges can be made at home for one abroad.

CHAPTER II.

INTERNATIONAL ECONOMIC PROBLEMS.

International Migration.—In the United States this is frequently considered a serious economic problem. When Malthusianism was a generally accepted theory, nations worried about too great a population. In modern times, however, and among the western nations, the more worry has been about a decrease or too slow an increase of population. Population frequently fails to increase so as to keep pace with economic progress. Nations have reason to rejoice over a rapid increase of population provided they can show a commensurate economic growth. Various modes have been adopted for promoting the increase of population. In France, Colbert agreed that whoever married before his twentieth year should be exempt from taxation until his twenty-fifth, and he who had ten children, all living, should be exempt from taxation for all time. America has always called for immigrants. There has always been room for mature men, especially men from thickly peopled and highly civilized countries. Such men can promote the industries of the country of their adoption. The problem therefore, does not concern the mere coming of immigrants, but the character of the immigrants and their assimilation. If they bring no capital whatever with them, they are of no advantage, unless they are good and able workmen. If they have clear heads or able bodies, they are sure to do their part in developing the economy of the nation. Either intelligence or physical strength will constitute capital enough to make them welcome additions. On the other hand, if they come without any worldly goods and their minds have assumed that state of weakness and dependence which characterizes chronic pauperism, and which unfits its possessor for self help, they are unwelcome citizens. Mere lack of worldly goods is to be distinguished from the pauper condition. Other things

being equal, persons who have from time to time received public aid, or for long periods have been associated in families having pauper dependencies, are liable to become and remain chronic paupers. They assume the pauper state or condition. The burden of supporting them falls upon all members of the community, and industrial activity must be vigorous in proportion to the number of the pauper class. The second class of unwelcome immigrants is the criminal class. It is not the criminal by passion, or the insane criminal, which is to be feared as the result of unlimited immigration, but rather the "born" criminal. He is sometimes called the congenital or instinctive criminal. He possesses a vicious state of mind, due either to hereditary influences, or long association with vice and crime. In some cases it is due to both. The international migration problem relates to the exclusion of these unwelcome classes, and the promotion of migration on the part of the other classes. Statisticians claim that, in recent years, the growth of pauperism and crime has been at a standstill in Europe, and has increased in the United States.

Chinese Exclusion, is not inaugurated to keep out the unwelcome classes which have been specified. The one real argument against Chinese immigrants has been their failure to become naturalized, or to become American citizens. Back of this, however, is the fact that the politics as well as the economics of the Orient are so different from our own, that it is difficult if not impossible for the eastern people to adapt themselves to our economic conditions or become an integral part of our body politic. It is certainly not possible in the case of large numbers in a brief period of time. The change means something like the passing of a people from the economic stage of the village to the economic stage of the nation. It cannot be a sudden change, but must be a growth involving the lapse of long periods of time.

International Health.—International migration and communication have become so constant and assumed such vast proportions as to cause the preservation of the public health to become an international economic problem. All the modern nations have instituted systems of public sanitation. In Europe there are three systems. There is first:

1. *The French System.* Under this system public hygiene is directed by Councils of Public Health. These councils have purely consultative powers. Executive authority is entrusted to a chief health officer, or a Prefect, who is ex-officio President of the Council. Over all there is a National Council, having particular charge of quarantines. The French system prevails in France, Italy, Belgium and Spain.

2. *The English System* is regulated by a comprehensive scheme of sanitary legislation. The system was inaugurated by the acts looking to the regulation of sewerage in the reigns of Henry VIII. and Elizabeth. Later on public sanitation fell into disuse and the United Kingdom assumed such an unsanitary state that the cholera killed seventy thousand in one year. In 1848 health laws were enacted for the drainage of marshes, streets and houses, and for preventing the contamination of rivers and streams. Aqueducts and sewers were established. Under the English system the execution of the health laws is entrusted to a General Board of Health for each municipality. In minor instances, however, it is vested in Poor Boards.

3. *The German System,* which is the third in vogue, comprises a series of bureaus. There is first, a District Health Physician; then of a higher grade the official Guardian of the Public Health. Above that officer is the Court Physician, charged with attendance on the poor. A little higher is the Medical College, having provincial authority. At the head of the system is a Superior Committee. Holland, Russia, Sweden and Denmark have at various times followed Germany in the use of this system.

In the United States, the several states have from time to time enacted sanitary legislation. A fair sample of this state legislation is that of New York, which provides a Town Board of Health in each town, and a Municipal Board of Health for each city. A State Board of Health has general supervision and powers. The statutes grant autocratic powers to these various boards. They can abate and summarily remove anything which is detrimental to the public health, whether it be a sewer or cess-pool, a slaughter house or a stagnant pond. There is also a National Board of

Health. That board, however, having but little authority within the precincts of a state, is largely of an advisory nature. It has exclusive jurisdiction only upon United States property.

Necessity of Centralization.—The time will come, doubtless, when the states will have to surrender some authority to a national body. While each state may be able to cope with a disease arising within its own borders, some more centralized authority is necessary to restrict epidemics assuming national proportions. Intercommunication between the several states is such that a wider and more centralized authority will be demanded. The conflict of authority which arose at New York during the threatened cholera invasion of the summer of 1892, showed the weakness of a health system, or in that case a quarantine system, under the local direction of the states. Legislation designed to inaugurate a national quarantine system will, in time, overcome these defects.

International Health Boards.—International commerce and travel is so far reaching that diseases are liable to assume an international character, and to meet the condition of things national boards of health must be empowered to inaugurate and maintain international sanitary regulations and quarantines. For centuries cholera has been endemic in parts of Asia. The meager facilities for its communication westward have prevented its becoming epidemic in America, except at rare intervals. When communication with India, for instance, was by sailing vessels, around the Cape of Good Hope, the chances for the introduction of the disease into Europe were slight. The opening of the Suez canal, accompanied by constant and quick steam communication with cholera ports, has infinitely magnified the opportunities for cholera epidemics in the West. General increase of intercommunication has followed the increase of transportation facilities between all parts of Asia and all parts of Europe and America. Commerce can not stop for fear of contagion. It must go on. The nations of the world will need to agree upon a system of quarantine and by friendly co-operation inaugurate measures preventive of international epidemics.

International Money.—Each nation having its own coin-

age and monetary system, a multiplicity of moneys results. It becomes a source of inconvenience in international commerce. It deters intercommunication. Much has been done to bring about an international, or more properly, a universal system of coinage. A beginning was made in Europe by the Latin Monetary Union, formed early in the century, composed of France, Spain, Italy and Belgium, and which existed for seventy years. The recent international monetary conference of Brussels, afforded some evidence of international monetary growth. The primary purpose of that conference was to consider by what means, if any, the use of silver could be increased in the currency systems of the nations of the world. So far, international effort has been mainly directed toward the formation of international agreements regarding the use of gold and silver as money. If the great nations of the world could adopt a universal system of coinage by agreeing upon a standard of purity of the metals, and by entering into an agreement concerning the relative use and coinage of gold and silver, the first great step would have been taken towards an international money. A greater achievement would be the coinage of a few gold pieces, by authority of the United States and the principal nations of Europe. These would constitute a universal circulation. They could be easily followed by the adoption of an international bank note. It would be of a universal type and have a universal purchasing power. It would have currency in all countries. If the great commercial nations of the world could reach that stage of economics wherein authority could be conferred upon an international body to issue such notes upon the separate and binding pledge of each nation for their redemption, those notes would soon have currency, even among nations which did not officially recognize them. Their commercial use would compel a demand for them, in spite even of the active resistance of a few lesser nations. The disadvantages arising when the currency of one country has no circulating power in another, are quite evident. The currency of one country accumulating in another, must be remitted; transportation must be paid for; insurance premiums must be paid. The foreign bill of exchange is the

primitive international bank note. For centuries it has acted in the settlement of balances of international trade, and enabled merchants to avoid the necessity of transportating coin. Give it the sanction of international agreement and international pledge of redemption and it becomes paper money instead of money paper.

CHAPTER III.

A WORLD ECONOMY.

The Preparations for it.—The attempts which have been made to solve the problems referred to in the last chapter, are preparations for a world economy. There are other preparations which may be referred to more by way of suggestion, than as accomplished facts. The various national economics are now the units of economics. The economic life of the people of the United States under its independent political organization furnishes a national economy. It is the same with the economic life of the people organized into other political units. These various national economics do not by any means make up a world economy. It is our pleasure, however, to observe how they are growing into a unity. We may profitably do so, even though we cannot say that they will ever attain that unity.

The study began with The Economics of the Family. That is the title of the first part of the work. That part concerns the economic life and material welfare of the family as an economic unit. Passing on to the other parts of the book, economic progress is seen to have been from the isolated effort of one family getting a living by itself—producing all its wants by the labor of its own members, bound together by the social ties of the family hearth, or more frequently by the family camp-fire, through the isolated village, economically independent of every other village, and then through the city, to the nation. The nation represents many families, villages and cities, mutually co-operating. Getting a living appears to be easier with each advancing stage. Isolation has ceased and co-operation and economic dependence have taken its place. This very economic evolution is, in itself, a great preparation for a still higher form of economic activity. What shall it be? It may be first the economic co-operation of several nations—like

an economic union of the Americas, of Europe, or the nations of Asia, and through such as these a world economy. A few specific instances of preparation for a world economy and of changes which such an economy necessitates, may be singled out and mentioned in the succeeding paragraphs.

International Investments.—The time has come when English money is no longer wholly invested in England. Dutch capital is not confined to Holland, nor German capital to Germany. American stocks are quoted in all the great foreign exchanges as habitually as home stocks. Dutch bondholders control railways in the United States as well as railways in Africa. English syndicates control some of the greatest manufacturing interests of the United States. American capital is building railways in Mexico and in the countries of South America. It is no longer the home market for home money. The world is the field for the investment of capital and for the capitalization of industrial enterprises. Indeed, it is frequently the case that a foreign investment presents greater allurements to the capitalist than a home investment of the same character. The distant corners of the earth, where the greatest returns can be had, is where money is sent. The stocks representing these international investments, having a market quotation at national monetary centers, are fast tending to take the place of gold in settling balances between nations. As mediums for the settlement of differences of exchange, the stocks have the advantage of gold, because their ownership can be transferred by cablegram, and time and space are annihilated.

International Labor Organizations.—The international organization of labor may not yet have advanced equally with the international organization of capital. Such organization, however, following past economic growth will tend to follow hard after the organization of capital, even to treading upon its heels. In the United States there are many national labor organizations, such as those of the miners, the iron workers, the cigar makers, and railway employes. These instances are not selected because they represent the highest type of national organization, but as illustrations simply. These national

organizations are reaching out to affiliate with European organizations.

In Europe, international organization has advanced a step higher. The International Congress of Miners first met at Jolimont, Belgium, in 1890. Its second convention was in Paris in 1891. At Westminister in 1892, delegates were present from Germany, Belgium, France, Austro-Hungary, England, Scotland and Wales. They claimed to speak for nine million miners, and the congress placed its objects on record as follows: "To bring together the mining nationalities of the world; to limit the hours of under-ground labor to eight; to obtain legislation for the proper supervision and inspection of mines, including some inspectors to be elected by the miners themselves." As these lines are written (April, 1893), a congress of international workers is called to meet at Zurich in May, 1893. The tendency to international co-operation is a crucial distinction between the gild system of the middle ages and the labor organization system of modern times. There was little union or co-operation among the gilds. Each gild was for itself and under the control of the industry of the town.

International organization of capital will compel and beget international organization of labor, but there is another reason for larger labor organization. It is the world market of the day. More extended reference will be made to this under the head of International Transportation, following. In this connection, however, its influence upon labor requires a word or two of illustration. There was a time when the Eastern States furnished the market for eastern mined coal. As long as that state of affairs continued, a miners' organization embracing the territory included in the market, answered the purposes of the men fairly well. But that condition of things has passed. The Eastern States are no longer the market for eastern mined coal. The Eastern, Middle and Western States are so closely and intimately connected by great trunk railways, that no mine can be said to possess a local market. The whole country is the coal market for all the coal. To render organization effective, the miners have found that there must

be national organization. Whatever good has resulted from the payment of wages based on a sliding scale, has come out of national organization. It would be of no possible use for the ironworkers of Pennsylvania to enter into an agreement with their employers for the payment of wages based on the selling price of iron, so long as their iron must compete in the market with the iron of all the other States, unless wages were paid elsewhere on the same basis. The employers, too, have found that a universal wage system based on a sliding scale according to the selling price of iron, has been not without benefit to themselves. In the memorable iron panic of 1880, the selling price of iron fell fifty per cent. within the period of four weeks. According to the scale in force throughout the country, the wages of ironworkers everywhere fell fifty per cent. accordingly. There was little or no trouble or clash between employe and employer. In no other way could the employers have reduced the wages of their employes fifty per cent. within that period, so as to meet the corresponding fall in the selling price of iron, without precipitating conflicts.

International Transportation.—Perhaps a more expressive headline would be "The World Market." Before trying to tell what it is, let us see how it has shown itself. The hop market of the east is not regulated by the hop crop of New York; nor is the hop market of the west fixed by the crop of Oregon or Washington. The crop of every section of every state has something to do with fixing the price of hops for the American continent, but it is only a factor after all. The crop of England or Germany has just as much to do with the making of the price. The crop of every section of every country of the earth governs the price of hops. The same thing is true with all agricultural products. It is true also as to all staple manufactures. The combined product of the world regulates the market, and the world is the market of every farmer and of every manufacturer. Dakota wheat is mixed in Liverpool bins with Russian and Indian wheat. Ohio mutton hangs side by side, in London stalls, with frozen mutton from Australia. Adam Smith told the English farmers, not long ago, that they never need fear competition in the production of a commodity like

beef, because of the difficulty of transportation. The beef production of England has, now, hardly anything to do with fixing the price of beef there. The introduction and use of great refrigerator compartments in ships has truly made the whole world the market for the beef of every farmer.

The evolution of transportation is responsible for this state of affairs. Fast lines of steamships bring all parts of the globe into communication. They have facilities for transporting all products. The Suez canal went a long way toward furthering the world economy. A Nicaragua canal may some time do even more. Railroad building in Africa points toward connecting the Indian ocean with the Atlantic. The great trans-Siberian railroad will connect Europe with the Pacific. The inhabitants of the Western portion of the United States may soon find it more speedy or convenient to reach Europe by sailing westward and crossing Siberia. It is not simply the *existence* of international transportation, however, which forms a preparation for a world economy. It is also the *cheapness* of such transportation. It has been cheapened until products of local manufactures, which formerly had no commercial value, can be utilized in other countries, and have thereby become of great revenue. Natural products which once went to waste are utilized in other parts of the globe.

Intercommunication.—International transportation has had the effect of increasing communication between nations. Intercommunication by individuals results finally in closer relations between governments. International comity has hitherto been of a political rather than of an economic character. The future of international co-operation for economic purposes, however, may be considered as fairly outlined by the International American Conference which convened at Washington in October, 1889. The professed object of the conference was to devise "some plan of arbitration for the settlement of disagreements and disputes that may hereafter arise, and for considering questions relating to the improvement of business intercourse and means of trade intercommunication between the said countries, and to encourage such reciprocal commercial relations as will be beneficial to all, and to secure more extensive markets

for the products of each of said countries." To this conference the governments and republics of Mexico, Central and South America, Haiti, San Domingo and Brazil were invited. Conferences for the discussion of international economics are likely to be more frequent in the future. As the German economist Roscher says: "Where the feeling that all mankind constitute one vast family, is stronger than that of their political and religious diversity; where the sense of right and the love of peace have extinguished every dangerous spark of ambition for empire and all warlike jealousy; where especially, their economic interests are rightly understood on both sides, a real conflict between the interests of two nations must always be a phenomenon of rare occurrence and an exception to the general rule, which should not be admitted until it has been clearly demonstrated to exist."

International Arbitration.—There is greater love of peace and greater toleration among nations. Peace conquers. The result of the court of arbitration upon the Alabama Claims appears to have been a signal and salutary lesson in favor of international arbitration. The practical utility of such courts was then demonstrated. Since that time arbitration for the settlement of international disputes and differences has steadily grown in favor. The settlement of the Behring Sea dispute between England and the United States by the court of arbitration which met at Paris in the summer of 1893, proved the continued growth of the principle of arbitration. In August, 1892, the first International Peace Congress assmbled at Berne. All the great powers were represented. A permanent International Peace Bureau was established. An International Arbitration Court was instituted, Berne to be its convening place. It adjourned to meet at Chicago during the International Columbian Exposition. International law is gradually but surely approaching a higher codification, and with an International Court to apply it, a court to whose decisions the great powers shall have pledged fidelity and obedience, international war will be practically abolished. International arbitration for the settlement of quarrels is then substituted in place of war. International economics must be correspondingly advanced.

International Religious Movements.—According to a conception of economics, widely diffused in recent times, ethics is an important economic factor. Political economy was formerly considered the science of driving a good bargain. Self interest was supposed to control men in all their dealings with each other. It was supposed to define and characterize all economic activity. Selfishness was the beginning of all economic law. So called laws of supply and demand were held to govern all economic activity, and ethics had nothing to do with it. According to old doctrines, some men were born to be laborers, and some to be capitalists, and a social gulf must necessarily intervene between the two classes. Each class must forever keep on protecting its class interests and fighting the other class. In recent times, however, there are those who advocate that economics teaches how there may be progress from lower to higher ethical conditions; how things may and ought to be better; "that in the general, peaceful pursuit of economic wellbeing, we have, in civilized nations, only recently reached an ethical goal longed for by the best for many generations," and "ethical purposes for the future, exist now as they have always existed, and they will mould our economic life."

Ethics inculcates higher standards of material welfare. It aims to develop the social side of economics, and to mould economic life according to ethical standards. It advocates a universal industrial peace and co-operation. It believes that the laborer is worthy of his hire, and that all men are laborers. According to the ethical idea of economics, religion would substitute the promotion of neighborly and brotherly welfare, in place of self interest. In the words of one of its advocates: "An economic world union of brothers is in process of formation, and this explains a large part of our anxiety and uneasiness with respect to social conditions. It is of no avail to say that business is excluded from the domination of ethical principals, for it is precisely in our economic life that ethical principles of any real validity must manifest themselves. It is only in an imperfect condition of society that sharp practice and hard bargaining can ever appear to men to be morally right. There is a very general determination to make all departments of social

life to conform with ethical principles, and that is what is meant by the phrase used by the Christian, 'the world is the subject of redemption.'" The World's Parliament of Religions in connection with the International Columbian Exposition, is in line with the introduction of ethical principles into economics. It is by such conferences that men can be brought to believe that mankind constitutes "one vast family;" that the economic nation is only an undivided part of one great whole, not yet brought into relation, but existing in embryo.

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